

## Site 98. Treed Paddock, High Street Rd, Wantirna Sth

Parts of what was a treed paddock until it became dissected by EastLink and a new alignment of George St. Melway ref. 72 D1

### Site Significance Level: *State*

- Much of the paddock has a full canopy of remnant trees that represent a small patch of the endangered EVC, Valley Heathy Forest;
- There is reasonable habitat for native birds;
- There are plant species that are rare locally or, in one case, throughout Victoria;
- There is good potential for ecological improvement by burning.



*Aerial photograph taken February 2007*



Scale 1:2,500  
10 0 20 40 60 80 100m

### Boundaries

This 1.80 ha site comprises the patches of trees and revegetated road verges outlined in red on the aerial photograph. There are no property boundaries to define the site but fence lines and the tops of batters have been used where reasonable to do so. The excluded strip along George St extends between the road's gutters.

**Land use & tenure:** Public land, zoned 'Public Park and Recreation' southwest of George St and 'Road Zone 1' (major road) in the rest of the site. George St and the EastLink Trail pass through the site.

### Site description

This site has had to be redefined since the first edition of this report (in which it was Site 99) because construction of the EastLink road has substantially transformed what was, at that time, a single, treed paddock. The paddock had been extensively grazed for many years, leaving predominantly introduced ground flora and hardly any shrubs. There has been some clearing of the dominant trees, but most of the site retains a fairly natural density of eucalypts and tall wattles that are remnants of the original Valley Heathy Forest vegetation. Given the poor condition of the ground flora, it is surprising to

find that in 2008 the site retained a viable population of the statewide-rare grass, *Austrostipa rudis* subsp. *australis* and individual specimens of the locally threatened species, Thin-leaf Wattle (*Acacia aculeatissima*) and Tree Everlasting (*Melicytus dentatus*). The presence of these species and the sensitive wildflowers Grey Parrot-pea (*Dillwynia cinerascens*) and Purple Coral-pea (*Hardenbergia violacea*) suggest that the soil probably retains a seed-bank of additional indigenous plant species that could be regenerated by fire (as has been done nearby in Dandenong Valley Parklands – Lorimer 2001b).

Some of the eucalypts appear to be hybrids. One of them near to the southern boundary may have genes of the nationally rare Yarra Gum (*Eucalyptus yarraensis*). Yarra Gums and their hybrids are present in substantial numbers along the Blind Ck corridor, to within about 400 m of this site.

The natural assets just described were overlooked in the Environmental Effects Statement for the Scoresby Transport Corridor (which included what is now the EastLink road).

### Relationship to other land

Birds that use this site as part of their habitat are believed to access it via the Blind Ck habitat corridor, which is just east of Cathies Lane and also passes 500 m to the south (along the Knox Trail). However, patterns of bird movements may have changed now that EastLink has opened.

**Bioregion:** Gippsland Plain

### Habitat type

**Valley Heathy Forest (EVC 127, Endangered):** The areas with a full tree canopy are estimated to measure 0.55 ha northeast of George St and 0.45 ha southwest of George St. Of these, approximately 0.1 ha is in fair ecological condition (rating C) and the remainder is in poor ecological condition (rating D).

**Canopy trees:** Dominated by *Eucalyptus goniocalyx* and *Acacia mearnsii*. Also present are *E. cephalocarpa* and *E. ovata*.

**Lower trees:** *Acacia mearnsii* and fewer *A. melanoxylon*.

**Shrubs:** Severely depleted by past clearing, grazing and slashing. *Bursaria spinosa* and *Cassinia arcuata* are present, plus a solitary, unexpected, *Melicytus dentatus*.

**Vines:** No true vines seen, but the scrambler, *Hardenbergia violacea*, was found.

**Ground flora:** Predominantly pasture species and weeds except for regenerating patches dominated by *Rytidosperma linkii* var. *fulvum*, *Microlaena stipoides* and *Austrostipa rudis*. There are also many of the opportunistic indigenous species, *Senecio hispidulus* and *Senecio quadridentatus*.

### Plant species

The following plant species were observed by the author on 10th March 2002. Additional species would no doubt be detectable in other seasons. The column headed 'Risk' indicates the indigenous species' risk of extinction in Knox with 'E'=Endangered and 'V'=Vulnerable. In addition, *Austrostipa rudis* subsp. *australis* is rare in Victoria.

Risk	Indigenous Species	Risk	Indigenous Species
E	<i>Acacia aculeatissima</i>		<i>Juncus gregiflorus</i>
V	<i>Acacia mearnsii</i>	E	<i>Juncus subsecundus</i>
V	<i>Acacia melanoxylon</i>		<i>Lomandra filiformis</i> subsp. <i>coriacea</i>
	<i>Acaena novae-zelandiae</i>		<i>Lomandra filiformis</i> subsp. <i>filiformis</i>
V	<b><i>Austrostipa rudis</i> subsp. <i>australis</i></b>		<i>Lomandra longifolia</i>
	<i>Austrostipa rudis</i> subsp. <i>rudis</i>	E	<i>Melicytus dentatus</i>
	<i>Bursaria spinosa</i>		<i>Microlaena stipoides</i>
	<i>Campylopus introflexus</i>		<i>Rytidosperma linkii</i> var. <i>fulvum</i>
	<i>Cassinia arcuata</i>		<i>Rytidosperma penicillatum</i>
V	<i>Dillwynia cinerascens</i>		<i>Rytidosperma racemosum</i>
V	<i>Eucalyptus cephalocarpa</i>		<i>Rytidosperma tenuius</i>
	<i>Eucalyptus goniocalyx</i>		<i>Senecio glomeratus</i>
V	<i>Eucalyptus ovata</i>		<i>Senecio hispidulus</i>
E	<i>Eucalyptus radiata</i>		<i>Senecio quadridentatus</i>
	<i>Eucalyptus hybrid</i>	V	<i>Veronica gracilis</i>
V	<i>Hardenbergia violacea</i>		

### Introduced Species

<i>Agrostis capillaris</i>	<i>Genista linifolia</i>	<i>Prunus cerasifera</i>
<i>Anthoxanthum odoratum</i>	<i>Hedera helix</i>	<i>Rhaphiolepis ?indica</i>
<i>Avena</i> sp.	<i>Holcus lanatus</i>	<i>Romulea rosea</i>
<i>Briza maxima</i>	<i>Hypochoeris radicata</i>	<i>Rosa rubiginosa</i>
<i>Bromus diandrus</i>	<i>Malus pumila</i>	<i>Rubus anglocandicans</i>
<i>Cirsium vulgare</i>	<i>Paspalum dilatatum</i>	<i>Sonchus oleraceus</i>
<i>Cynodon dactylon</i>	<i>Pinus radiata</i>	<i>Ulex europaeus</i>
<i>Dactylis glomerata</i>	<i>Pittosporum undulatum</i>	
<i>Ehrharta erecta</i>	<i>Plantago lanceolata</i>	

### Notes concerning some of the locally threatened plant species

*Austrostipa rudis* subsp. *australis* (a subspecies of Veined Spear-grass). Moderate numbers near High Street Rd, and possibly more widespread but unable to be confirmed due to seasonal factors.

*Acacia aculeatissima* (Thin-leaf Wattle). Only one plant found. Others may regenerate with fire.

*Melicytus dentatus* (Tree Violet). Only one plant found, an interesting occurrence for this part of Victoria because of its abnormally large distance from a stream.

The hybrid eucalypt that may involve parentage of *Eucalyptus yarraensis* would be of some significance if that parentage were to be confirmed. *Eucalyptus yarraensis* is nationally rare, but the significance of a hybrid is substantially lower.

### Fauna habitat features

The tree canopy provides habitat for native forest birds, as identified in the EES for the Scoresby Transport Corridor.

### 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*

The EES for the Scoresby Transport identified that this site was used by native forest birds in their movements around the landscape. Criterion 1.3 of Amos (2004) assigns **Local** significance to a 'Site (or one of a group of such sites) to form a strategic corridor of local importance and scale', which is believed to apply in this case. If this becomes an important matter, the continued role of the site for faunal movements should be checked by a specialist ecologist following commissioning of the EastLink road.

#### *Regionally Threatened Ecological Vegetation Class*

The EVC represented within the site is endangered and the vegetation meets the Department of Sustainability & Environment's definition of a 'remnant patch'. According to the criteria of 'Victoria's Native Vegetation Management – A Framework for Action' (NRE 2002a), even the most degraded remnant patches of native vegetation belonging to an endangered EVC have a conservation significance rating of High or Very High. It follows that the site is of **State** significance under criterion 3.2.3 of Amos (2004).

#### *Rare or Threatened Plants*

The statewide-rare *Austrostipa rudis* subsp. *australis* has a viable population at this site but its size may be moderate or large. This taxon is not endemic to Victoria (occurring also in Tasmania). It follows from criterion 3.1.2 that the site is of **State** significance if the population is large enough to be regarded as 'an important site' for the taxon, or **Regionally** significant otherwise. A survey in late November or early December would be required to resolve this.

Some of the other locally threatened plant species listed above have viable populations, thereby meeting criterion 3.1.5 for a site of **Local** significance.

### Threats

- Isolation of habitat by the newly constructed EastLink road, leading to reduced visitation by small insect-eating birds and hence a risk of worsening plant pests and diseases;
- Eucalypt dieback disease;
- Invasion by environmental weeds, of which the only ones rated as Serious are Gorse (*Ulex europaeus*) and the grass weeds, Brown-top Bent (*Agrostis capillaris*), Sweet Vernal-grass (*Anthoxanthum odoratum*) and Cocksfoot (*Dactylis glomerata*);
- Critically small population sizes of some plant species.

**Administration matters**

- This site is worthy of inclusion within the proposed ESO2 because it is a site of State significance for the reasons discussed above;
- The site is not included under the existing Vegetation Protection Overlay of the Knox Planning Scheme and was not recognised in the report by Water Ecoscience (1998);
- Experience nearby in Dandenong Valley Parklands suggests that there is good potential for additional indigenous species to regenerate if the site were to be burned. Burning should be conducted in spring, ideally November.

**Information sources used in this assessment**

- A botanical survey by Dr Lorimer on 22/1/04 according to the standard procedures described in Section 2.4 of Volume 1, 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;
- Similar data gathered by Dr Lorimer on 10/3/08 following completion of works for George St and EastLink, including compilation of species lists for each side of George St;
- Similar data gathered from the road verge and adjacent parts of the paddock by Dr Lorimer on 11/9/97 for the report, *'A Survey and Management Plan for Significant Vegetation of Roadsides in Knox'* by G.S. Lorimer for Knox City Council (May 1998, 137 pp.);
- A report, *'Assessment of Native Vegetation on the Mitcham to Frankston Freeway Alignment in Knox'*, by Dr Lorimer in July 2003 for Knox City Council;
- The 1998 *'Scoresby Transport Corridor Environment Effects Statement'*, particularly Supplement Volume H: Flora and Fauna by Williams L.M., Yugovic J.V., McGuckin J., Humphrey P. and Larwill S. (1998), in which part of this site is labelled as 'Site 5';
- Aerial photography from February 2001, April 2003 and February 2007;
- 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.

## **Road and Rail Corridors Recommended for ESO2**

Sites 88-97 on the coming pages contain road and rail reserves. Note that some sections of road reservation are included within sites in other sections, e.g. verges of roads passing through the Dandenong Valley Parklands.