

## Site 71. Delta Court Reserve, Rowville

A tiny Council reserve with regrowth of native vegetation. Melway ref. 81 J3.

### Site Significance Level: *State*

- The native vegetation belongs to the endangered Ecological Vegetation Class, Valley Heathy Forest. The number of species is unnaturally low but there are good prospects for improvement.

**Aerial photograph:** See page 350, which covers this site, Site 70 and 0.

### Boundaries

The site is the whole of a single lot, marked and labelled on the aerial photograph on page 350.

**Land use & tenure:** Council bushland reserve.

### Site description

This small reserve of 3,294 m<sup>2</sup> is at an elevation of just under 70 m on a south-facing slope of about 5% gradient. The soil is shallow, poorly draining, light grey loam over clay subsoil, derived from decomposition of the underlying Lower Devonian sedimentary rocks of the Humevale formation.

This site has been previously cleared, grazed and allowed to regenerate. This history has left it with a rather small number of indigenous plant species (thirty-five) but a high percentage cover of indigenous understorey. Council's bushland staff have vigorously controlled the Gorse that would otherwise have destroyed the site, and begun planting additional indigenous species to compensate for those that have been lost.

The more ecologically intact native vegetation is in the southern three-quarters of the site, west of the footpath.

Because of the predominance of indigenous plants and the small area involved, this site would be an excellent candidate for intensive restoration and enrichment through indigenous plantings to create a showcase of Rowville's seriously depleted native flora. The main impediment would be controlling Brown-top Bent (*Agrostis capillaris*, a grass weed) and Common Onion-grass (*Romulea rosea*, a weed in the Iris family).

### Relationship to other land

The nearest areas of native habitat are Rowville Primary & Secondary Schools (Site 70), the Wellington Rd road verge (Site 96), the Rowville Electricity Terminal Station (Site 72) and the small remnant on Brusco Close (0). The last of these is facing imminent replacement by houses. Most local native birds and flying insects would be able to fly easily between these sites, but the more ecologically sensitive species would not find Delta Court Reserve's habitat sufficiently attractive to cross the main roads and stark residential area between the sites.

**Bioregion:** Gippsland Plain

### Habitat types

Valley Heathy Forest (EVC 127, **Endangered**): Estimated as 2,700 m<sup>2</sup>, comprising 1,700 m<sup>2</sup> in fair ecological condition (rating C) and 1,000 m<sup>2</sup> in poor ecological condition (rating D).

Canopy trees: *Eucalyptus radiata* with smaller numbers of *E. goniocalyx*, *E. cephalocarpa* and *E. melliodora*.

Lower trees: Moderately dense, comprising *Allocasuarina littoralis*, *Acacia mearnsii* and fewer *Exocarpos cupressiformis*.

Shrubs: Severely depleted by past clearing. Remaining species are *Acacia paradoxa*, *Bursaria spinosa*, *Leptospermum continentale* and a single *Pomaderris racemosa*.

Vines: There are reasonable numbers of the light twiner, *Billardiera mutabilis*.

Ferns: None.

Ground flora: Dominated by *Microlaena stipoides*, *Themeda triandra*, *Poa morrisii* and *Austrostipa rudis* subsp. *rudis*.

The following additional species are abundant: *Rytidosperma* species, *Gonocarpus tetragynus*, *Poranthera microphylla* and *Tricoryne elatior*. There are smaller numbers of the following species that are typical of Valley Heathy Forest: *Bossiaea prostrata*, *Burchardia umbellata*, *Deyeuxia quadriseta*, *Dichondra repens*, *Dillwynia cinerascens*, *Eragrostis brownii*, *Hypericum gramineum*, *Leptorhynchos tenuifolius*, *Lomandra filiformis* subsp. *coriacea*, *Opercularia varia*, *Oxalis perennans*, *Veronica gracilis* and *Viola hederacea*.

## Plant species

The following plant species were observed by the author on 2nd May 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. In addition, *Pomaderris racemosa* is rare throughout the Melbourne region. A single plant of that species was seen.

Risk	Indigenous Species	Risk	Indigenous Species
V	<i>Acacia mearnsii</i>		<i>Gonocarpus tetragynus</i>
	<i>Acacia paradoxa</i>	E	<i>Hypericum gramineum</i>
V	<i>Acacia verticillata</i>	V	<i>Leptorhynchos tenuifolius</i>
V	<i>Allocasuarina littoralis</i>		<i>Leptospermum continentale</i>
	<i>Austrostipa rudis</i> subsp. <i>rudis</i>		<i>Lomandra filiformis</i> subsp. <i>coriacea</i>
	<i>Billardiera mutabilis</i>		<i>Microlaena stipoides</i>
	<i>Bossiaea prostrata</i>	V	<i>Opercularia varia</i>
	<i>Burchardia umbellata</i>		<i>Oxalis exilis/perennans</i>
	<i>Bursaria spinosa</i>		<i>Poa morrisii</i>
	<i>Deyeuxia quadriseta</i>	C	<b><i>Pomaderris racemosa</i></b>
V	<i>Dianella longifolia</i> s.l.		<i>Poranthera microphylla</i>
	<i>Dichondra repens</i>		<i>Rytidosperma laeve</i>
V	<i>Dillwynia cinerascens</i>		<i>Rytidosperma penicillatum</i>
	<i>Eragrostis brownii</i>		<i>Rytidosperma setaceum</i>
V	<i>Eucalyptus cephalocarpa</i>		<i>Themeda triandra</i>
	<i>Eucalyptus goniocalyx</i>		<i>Tricoryne elatior</i>
V	<i>Eucalyptus melliodora</i>	V	<i>Veronica gracilis</i>
E	<i>Eucalyptus radiata</i>	E	<i>Viola hederacea</i>
V	<i>Exocarpos cupressiformis</i>		
<b>Introduced Species</b>			
	<i>Agrostis capillaris</i>		<i>Hypochoeris radicata</i>
	<i>Anthoxanthum odoratum</i>		<i>Paspalum dilatatum</i>
	<i>Dactylis glomerata</i>		<i>Plantago lanceolata</i>
	<i>Danthonia procumbens</i>		<i>Romulea rosea</i>
			<i>Rubus anglocandicans</i>
			<i>Ulex europaeus</i>

## Fauna of special significance

None found.

## Fauna habitat features

None found.

## Significance ratings

### Endangered Vegetation Types

Under the Department of Sustainability & Environment's criteria, this site contains a 'remnant patch' of an endangered EVC. It follows from Appendix 3 of *Victoria's Native Vegetation Management - a Framework for Action* (NRE 2002a) that Delta Court Reserve's vegetation is of at least High conservation significance. This, in turn, gives the site **State** significance under the Department of Sustainability & Environment's standard criteria (Amos 2004 – criterion 3.2.3).

### Locally Threatened Plant Species

Some of the locally threatened plant species listed above have viable populations in combination with nearby native vegetation, thereby meeting criterion 3.1.5 of Amos (2004) for a site of **Local** significance.

## Threats

- Invasion by environmental weeds, of which the following are the only ones rated 'Serious': Brown-top Bent (*Agrostis capillaris*, a grass weed) and Common Onion-grass (*Romulea rosea*, a weed in the Iris family);
- Loss or decline of plant species whose populations are so small that they are vulnerable to inbreeding, poor reproductive success or misadventure.

**Management issues**

- A small trial burn would determine whether any plant species such as *Kennedia prostrata* are still present as soil-stored seed. Trials in the Dandenong Valley Parklands have shown Valley Heathy Forest to recover remarkably well from a very degraded state after fire;
- All plantings in the reserve should be carefully documented so that natural regeneration can be monitored without confusion from planted specimens;
- The solitary *Pomaderris racemosa* should be outbred by propagating it and others from the larger population at Starlight Reserve, then exchanging the propagated plants between the reserves.

**Administration matters**

- This site is worthy of inclusion within the proposed Environmental Significance Overlay, ESO2, because of the endangered EVC which is heavily fragmented and occurs predominantly in urban surroundings;
- The site is presently included under Vegetation Protection Overlay Schedule 1 of the Knox Planning Scheme, based on the description of Site 10 of the report by Water Ecoscience (1998);
- The Planning Scheme zoning is Public Park and Recreation Zone (PPRZ).

**Information sources used in this assessment**

- A site survey by Dr Lorimer for one hour on 24th May 2002, following this study's standard procedures discussed in Section 2.4 of Volume 1. This included a description of the composition and condition of the vegetation, compilation of a list 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;
- A list of grasses seen incidentally by Dr Lorimer during a brief visit to the reserve on 2nd March 2000;
- 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.