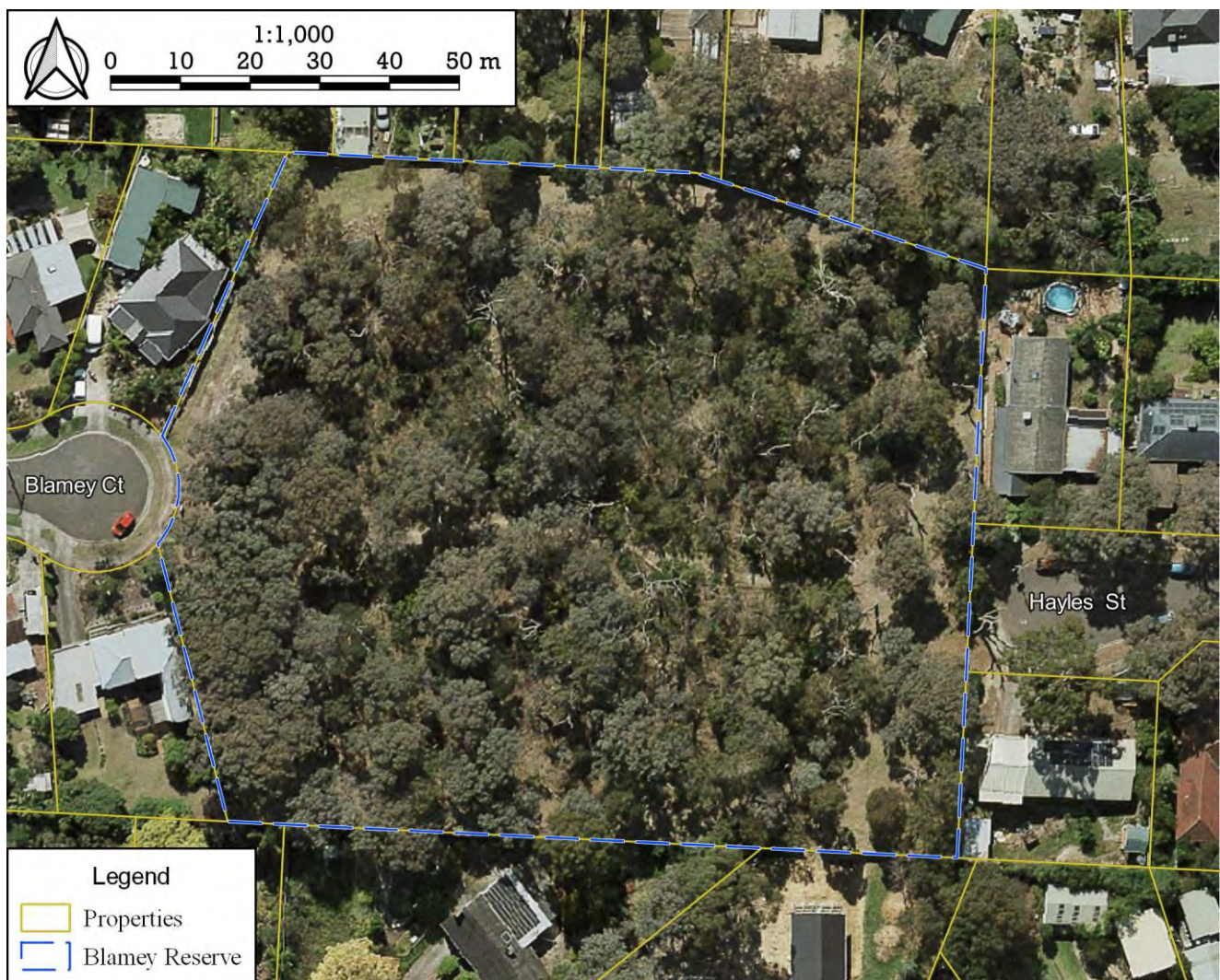


## Site 28. Blamey Reserve, Boronia

A small Council bushland reserve on the steep, western slope of a ridge between Dorset Rd and Army Rd.

Summary of significant features:

- **Nationally significant:** an abundance of the flat-pea, *Platylobium infecundum*, which is Critically Endangered globally;
- **Nationally significant:** past (and potentially future) habitat for the Dandenong Ranges Cinnamon Wattle (*Acacia stictophylla*), which is Endangered globally;
- **State significance:** dozens of the spear-grass, *Austrostipa rudis* subspecies *australis*, which is listed as Endangered under Victorian law;
- **State significance:** an intact example of the regionally-endangered vegetation type, Valley Heathy Forest, unusually dominated by Red Box trees (*Eucalyptus polyanthemus*), which is very rare in Knox;
- **Locally significant:** viable populations of scores of plant species threatened with dying out in Knox.



### Boundaries

The site is the area outlined with blue dashes above, measuring 1.04 ha. It comprises the Council reserve except for the narrow walkway through to Robertson Crescent in the north.

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

## Site description

The site's elevation ranges from 112 to 142 m with a steep slope of typically 1:4 and an aspect of west-northwest. The soil is shallow and stony, derived from hornfels.

The vegetation's ecological condition is highly patchy due to firebreaks, past excavations and mistreatment by some neighbours. The most intact parts are botanically very rich indeed. There is a large population of the flat-pea, *Platylobium infecundum*, which is Critically Endangered globally. The vegetation is dominated by roughly 50–100 Red Box trees (*Eucalyptus polyanthemos*), representing the majority of the species' population in Knox. The only other Red Box trees anywhere south of the Maroondah Highway are in the residential neighbourhood surrounding Blamey Reserve. The reserve is also a local stronghold of several other plant species, e.g. the Black Sheoak (*Allocasuarina littoralis*).

Knox City Council is managing the bushland very actively, including the use of fire to control environmental weeds, regenerate plant species and provide a broader variety of habitat for fauna.

## Relationship to other land

There is a fragmentary canopy of scattered remnant eucalypts from the eastern (uphill) edge of the reserve, along the ridge to Mountain Hwy in the north and to the south as far as a few hundred metres beyond the Old Joes Creek bushland area (Site 29). This canopy, combined with mature non-indigenous trees, facilitates movement of some bird life to and from the reserve. However, the size of the reserve is too small for most birds to spend much time there and many species of native birds and insects do not visit because native understorey is practically non-existent within 600 m of the reserve. These impressions are evidenced by the brevity of the bird list that was accumulated during the several days in spring when the survey was done for the first edition of this report.

Nevertheless, the movements of birds and insects that do occur are likely to be very important for introducing seeds and pollen of indigenous plant species, which in many cases are at risk of inbreeding.

**Bioregion:** Gippsland Plain.

## Habitat type

The following description of the vegetation mostly comes from the author's 2017 management plan:

Valley Heathy Forest (EVC 127, **regionally Endangered**) is the EVC that best matches this rare or unique vegetation community characterised by the dominance of Red Box (*Eucalyptus polyanthemos*) and an abundance of Black She-oak (*Allocasuarina littoralis*). There is approximately 0.95 ha of native vegetation, estimated to comprise 0.37 ha in good ecological condition (rating B), 0.37 ha in fair ecological condition (rating C) and 0.21 ha in poor ecological condition (rating D).

Canopy trees: *Eucalyptus polyanthemos* (Red Box) is most abundant, *E. goniocalyx* (Bundy) is almost as abundant, and there are smaller numbers of *E. radiata* (Narrow-leaved Peppermint) and fewer still of *E. obliqua* (Messmate Stringybark). There is a pair of *E. cephalocarpa* (Mealy Stringybark) trees right in the middle of the reserve. The tree crowns overlap slightly in some areas and are well separated in areas most affected by tree deaths since 2005. Excluding seedlings, the typical separation between trunks varies from 1–2 m close to the Blamey Ct turning circle, 3 m for most of the reserve's northern half and in the southwest corner, grading to approximately 8 m in the southeast (uphill) corner.

Sub-canopy trees: *Allocasuarina littoralis* (Black Sheoak) and fewer *Exocarpos cupressiformis* (Cherry Ballart) form a well-developed stratum of sub-canopy trees.

Shrubs: Mostly up to 2–3 m tall and of variable density, depending on the recent history of clearing, digging, fire and other disturbance. In recent years, *Cassinia longifolia* (Shiny Cassinia) has become dominant and *Cassinia sifton* (Drooping Cassinia) fairly abundant, despite both having been absent in 1985–2001 (and probably for many years prior). Other common shrub species include *Acacia myrtifolia* (Myrtle Wattle), *Bursaria spinosa* (Sweet Bursaria), *Correa reflexa* (Common Correa), *Epacris impressa* (Common Heath), *Indigofera australis* (Austral Indigo) and *Kunzea leptospermoides* (Yarra Burgan). *Pultenaea gunnii* (Golden Bush-pea) was fairly common in 2001 but has since died out. Visibility in the northern half of the reserve declined from typically 30 m in 2001 to 20 m in 2017.

Vines: The light twiner, *Billardiera mutabilis* (Common Apple-berry), is fairly abundant. *Comesperma volubile* (Love Creeper) was present in 2001 but has since died out.

**Creepers:** Abundant and diverse. The endangered species, *Platylobium infecundum* (a flat-pea), is abundant, as is *Hardenbergia violacea* (Purple Coral-pea). *Dichondra repens* (Kidney-weed) and *Goodenia lanata* (Trailing Goodenia) are moderately abundant in particular locations. *Oxalis exilis/perennans* (a wood-sorrel) is widespread. *Viola hederacea* (Ivy-leaf Violet) varies greatly in numbers according to each year's weather. Only two plants of *Kennedia prostrata* (Running Postman) have been observed, which was following fire.

**Ferns:** *Pteridium esculentum* (Austral Bracken) is dense in patches, but with low percentage foliage cover overall.

**Groundcover:** Densely grassy and rich in wildflowers. The layer is less than knee deep and has a total foliage cover of typically 80%. Different areas are dominated by different grass species. The most abundant groundcover species is *Rytidosperma pallidum* (Red-anther Wallaby-grass) but some patches are dominated by any of *Themeda triandra* (Kangaroo Grass), *Poa morrisii* (Soft Tussock-grass), *Gahnia radula* (Thatch Saw-sedge) or (in the least natural areas) *Microlaena stipoides* (Weeping Grass). *Lomandra filiformis* subsp. *coriacea* (Wattle Mat-rush), *Lomandra longifolia* subsp. *exilis* (Cluster-headed Mat-rush) and both local subspecies of *Austrostipa rudis* (Veined Spear-grass) are fairly abundant but not dominant. Other frequent species include *Drosera auriculata* (Tall Sundew), *Gonocarpus tetragynus* (Common Raspwort), *Arthropodium strictum* (Chocolate Lily), *Lepidosperma gunnii* (Slender Sword-sedge), *L. laterale* (Variable Sword-sedge), *Pimelea humilis* (Common Rice-flower) and *Rytidosperma tenuius* (Purplish Wallaby-grass). Orchids and lilies are abundant. *Acrotriche serrulata* (Honey-pots) and *Coronidium scorpioides* (Button Everlasting) are scarce but are often fairly abundant in Valley Heathy Forest.

## Plant species

The following plant species have recorded in the reserve, excluding parts of the perimeter firebreak that have no indigenous species. For those species not recorded by the author in his brief search for indigenous species in June 2024, the most recent year of record is shown by superscripts: 2001–2004 refers to surveys by the author for the first edition of this report; 2017 refers to the author's preparation of a management plan; 1985 refers to a survey by Andrew Paget; and other years refer to incidental observations by various people. The column headed 'Risk' indicates the indigenous species' risk of dying out in Knox, with 'C'=Critically endangered, 'E'=Endangered, 'V'=Vulnerable and 'N'=Near threatened. In addition, *Platylobium infecundum* is critically endangered, globally, *Acacia stictophylla* is endangered globally and *Austrostipa rudis* subsp. *australis* is endangered in Victoria.

### Indigenous mosses and liverworts

*Campylopus clavatus*, Broody Swan-neck Moss<sup>2017</sup>  
*Campylopus introflexus*, Heath Star Moss<sup>2017</sup>  
*Chiloscyphus semiteres*, Green Worms<sup>2017</sup>  
*Hypnum cupressiforme*, Common Hypnum<sup>2017</sup>

### Risk Other wild indigenous species

*Acacia dealbata*, Silver Wattle<sup>2001</sup>  
V *Acacia mearnsii*, Black Wattle  
V *Acacia melanoxylon*, Blackwood  
E *Acacia myrtifolia*, Myrtle Wattle  
V *Acacia stictophylla*, Dandenong Range  
Cinnamon Wattle<sup>2017</sup>  
E *Acrotriche serrulata*, Honey-pots  
V *Allocasuarina littoralis*, Black Sheoak  
C *Arthropodium milleflorum*, Pale Vanilla-lily<sup>2017</sup>  
*Arthropodium strictum*, Chocolate Lily  
*Austrostipa pubinodis*, Tall Spear-grass<sup>2017</sup>  
V *Austrostipa rudis* subsp. *australis*, Veined  
Spear-grass  
*Austrostipa rudis* subsp. *rudis*, Veined Spear-  
grass  
*Billardiera mutabilis*, Common Apple-berry  
V *Brunonia australis*, Blue Pincushion  
*Burchardia umbellata*, Milkmaids<sup>2022</sup>  
*Bursaria spinosa*, Sweet Bursaria

### Risk Other wild indigenous species

V *Caesia parviflora*, Pale Grass-lily<sup>2017</sup>  
*Carex breviculmis*, Short-stem Sedge<sup>2017</sup>  
*Cassinia aculeata*, Common Cassinia<sup>2017</sup>  
*Cassinia longifolia*, Shiny Cassinia  
E *Comesperma volubile*, Love Creeper<sup>2021</sup>  
C *Coronidium scorpioides*, Button Everlasting  
C *Correa reflexa* var. *reflexa*, Common Correa  
*Cotula australis*, Common Cotula<sup>2020</sup>  
*Crassula decumbens*, Spreading Crassula<sup>2017</sup>  
C *Daviesia latifolia*, Hop Bitter-pea  
C *Daviesia leptophylla*, Narrow-leaf Bitter-pea<sup>2001</sup>  
*Deyeuxia quadriseta*, Reed Bent-grass  
*Dianella longifolia* var. *longifolia*, Pale Flax-  
lily<sup>2017</sup>  
*Dianella revoluta*, Black-anther Flax-lily  
*Dichelachne rara*, Common Plume-grass<sup>2017</sup>  
*Dichondra repens*, Kidney-weed  
V *Dillwynia cinerascens*, Grey Parrot-pea  
C *Diuris orientis*, Wallflower Orchid<sup>2021</sup>  
V *Drosera aberrans*, Scented Sundew  
V *Drosera auriculata*, Tall Sundew  
C *Epacris impressa*, Common Heath  
E *Eucalyptus cephalocarpa*, Mealy Stringybark<sup>2020</sup>  
V *Eucalyptus goniocalyx*, Bundy

Risk Other wild indigenous species

- E *Eucalyptus obliqua*, Messmate Stringybark  
 E *Eucalyptus polyanthemos*, Red Box  
 E *Eucalyptus radiata*, Narrow-leaved Peppermint  
 V *Exocarpos cupressiformis*, Cherry Ballart  
 C *Gahnia radula*, Thatch Saw-sedge  
*Gonocarpus tetragynus*, Common Raspwort  
 N *Goodenia lanata*, Trailing Goodenia  
 C *Hackelia suaveolens*, Sweet Hound's-tongue<sup>2017</sup>  
 E *Hardenbergia violacea*, Purple Coral-pea  
 C *Hibbertia australis*, Upright Guinea-flower<sup>2017</sup>  
 C *Hovea heterophylla*, Common Hovea  
 E *Hypericum gramineum*, Small St John's Wort<sup>2020</sup>  
 C *Indigofera australis*, Austral Indigo  
*Juncus pallidus*, Pale Rush<sup>2017</sup>  
 E *Juncus subsecundus*, Finger Rush<sup>2017</sup>  
 C *Kennedia prostrata*, Running Postman<sup>2004</sup>  
*Kunzea leptospermoides*, Yarra Burgan<sup>2017</sup>  
 V *Lagenophora sublyrata*, Slender Bottle-daisy<sup>2017</sup>  
*Lepidosperma gunnii*, Slender Sword-sedge<sup>2017</sup>  
 V *Lepidosperma laterale*, Variable Sword-sedge  
 C *Leptospermum continentale*, Prickly Tea-tree<sup>2017</sup>  
 C *Leucopogon virgatus*, Common Beard-heath<sup>1985</sup>  
*Lomandra filiformis* subsp. *coriacea*, Wattle Mat-rush  
*Lomandra filiformis* subsp. *filiformis*, Wattle Mat-rush<sup>2017</sup>  
*Lomandra longifolia* subsp. *exilis*, Cluster-headed Mat-rush  
*Lomandra longifolia* subsp. *longifolia*, Spiny-headed Mat-rush  
 V *Luzula meridionalis*, Common Woodrush<sup>2017</sup>  
*Microlaena stipoides*, Weeping Grass  
 V *Microtis parviflora*, Slender Onion-orchid<sup>2017</sup>  
 V *Opercularia varia*, Variable Stinkweed<sup>2017</sup>  
*Oxalis exilis/perennans*, Wood-sorrel  
 C *Ozothamnus obcordatus*, Grey Everlasting  
 E *Pimelea humilis*, Common Rice-flower  
 E *Plantago varia*, Variable Plantain<sup>2013</sup>  
 E *Platylobium infecundum*, a flat-pea  
 E *Platylobium obtusangulum*, Common Flat-pea<sup>2017</sup>  
*Poa morrisii*, Soft Tussock-grass  
 V *Polyscias sambucifolia*, Elderberry Panax<sup>2001</sup>  
*Poranthera microphylla*, Small Poranthera<sup>2020</sup>  
*Pteridium esculentum*, Austral Bracken  
*Pterostylis nutans*, Nodding Greenhood  
 V *Pultenaea gunnii*, Golden Bush-pea<sup>2004</sup>  
*Rytidosperma fulvum*, Leafy Wallaby-grass

Risk Other wild indigenous species

- E *Rytidosperma pallidum*, Red-anther (or Silvertop) Wallaby-grass  
*Rytidosperma penicillatum*, Slender Wallaby-grass<sup>2017</sup>  
*Rytidosperma pilosum*, Velvet Wallaby-grass<sup>2017</sup>  
*Rytidosperma racemosum*, Clustered Wallaby-grass  
*Rytidosperma setaceum*, Bristly Wallaby-grass<sup>2017</sup>  
*Rytidosperma tenuius*, Purplish Wallaby-grass  
 V *Senecio glomeratus*, Annual Fireweed<sup>2017</sup>  
*Senecio hispidulus*, Rough Fireweed<sup>2020</sup>  
 V *Senecio prenanthoides*, Common Fireweed  
*Senecio quadridentatus*, Cotton Fireweed  
 V *Spyridium parvifolium*, Australian Dusty Miller<sup>2001</sup>  
 E *Stackhousia monogyna/subterranea*, Candles  
 E *Stylidium armeria*, Common Triggerplant<sup>2017</sup>  
*Tetrarrhena juncea*, Forest Wire-grass  
 C *Tetratheca ciliata*, Pink-bells<sup>2017</sup>  
 C *Thelymitra ixioides*, Dotted Sun-orchid<sup>2001</sup>  
 E *Thelymitra ?peniculata*, Trim Sun-orchid<sup>2017</sup>  
*Themeda triandra*, Kangaroo Grass  
 E *Thysanotus patersonii*, Twining Fringe-lily<sup>1985</sup>  
*Tricoryne elatior*, Yellow Rush-lily  
 E *Viola hederacea*, Ivy-leaf Violet<sup>2017</sup>  
 E *Wurmbea dioica*, Common Early Nancy<sup>2001</sup>  
 E *Xanthorrhoea minor*, Small Grass-tree

Risk Planted species

- C *Acacia genistifolia*, Spreading Wattle  
 E *Bulbine bulbosa*, Yellow Bulbine-lily<sup>2017</sup>  
*Lomandra longifolia* subsp. *longifolia*, Spiny-headed Mat-rush  
 C *Ozothamnus obcordatus*, Grey Everlasting

Introduced species

- Acacia howittii*, Sticky Wattle<sup>2017</sup>  
*Agapanthus praecox*, Agapanthus<sup>2001</sup>  
*Allium triquetrum*, Angled Onion<sup>2020</sup>  
*Anthoxanthum odoratum*, Sweet Vernal-grass<sup>2020</sup>  
*Briza maxima*, Large Quaking-grass<sup>2020</sup>  
*Cassinia sifton*, Sifton Bush<sup>2017</sup>  
*Centaureum erythraea*, Common Centaury<sup>2017</sup>  
*Cerastium glomeratum*, Common Mouse-ear Chickweed<sup>2017</sup>  
*Chrysanthemoides monilifera* subsp. *monilifera*, Boneseed<sup>2017</sup>  
*Cirsium vulgare*, Spear Thistle<sup>2017</sup>  
*Cotoneaster glaucophyllus*, Cotoneaster<sup>2017</sup>  
*Cotoneaster simonsii*, Himalayan Cotoneaster<sup>2001</sup>  
*Dactylis glomerata*, Cocksfoot<sup>2017</sup>  
*Ehrharta erecta*, Panic Veldt-grass<sup>2017</sup>  
*Ehrharta longiflora*, Annual Veldt-grass<sup>2020</sup>

Introduced species

*Erigeron bonariensis*, Flaxleaf Fleabane<sup>2017</sup>  
*Erigeron sumatrensis*, Fleabane<sup>2004</sup>  
*Euphorbia peplus*, Petty Spurge<sup>2001</sup>  
*Fraxinus angustifolia*, Desert Ash<sup>2017</sup>  
*Freesia leichtlinii*, Freesia<sup>2017</sup>  
*Galium aparine*, Cleavers<sup>2017</sup>  
*Genista monspessulana*, Montpellier Broom<sup>2017</sup>  
*Gladiolus undulatus*, Wild Gladiolus<sup>2017</sup>  
*Grevillea hybrids and cultivars*<sup>2017</sup>  
*Hedera helix/hibernica*, Ivy<sup>2017</sup>  
*Holcus lanatus*, Yorkshire Fog<sup>2001</sup>  
*Hypochaeris radicata*, Cat's Ear<sup>2020</sup>  
*Ixia maculata*, Yellow Ixia<sup>2017</sup>  
*Muscari armeniacum*, Grape Hyacinth<sup>2001</sup>  
*Oxalis incarnata*, Pale Wood-sorrel<sup>2020</sup>  
*Oxalis pes-caprae*, Soursob<sup>2017</sup>  
*Pinus radiata*, Monterey Pine<sup>2001</sup>

Introduced species

*Pittosporum undulatum*, Sweet Pittosporum<sup>2017</sup>  
*Plantago lanceolata*, Ribwort<sup>2020</sup>  
*Prunus cerasifera*, Cherry-plum<sup>2017</sup>  
*Romulea rosea*, Common Onion-grass<sup>2017</sup>  
*Rubus anglocandicans*, Blackberry<sup>2017</sup>  
*Solanum nigrum*, Black Nightshade<sup>2017</sup>  
*Sonchus oleraceus*, Sow-thistle<sup>2020</sup>  
*Sparaxis sp.*, Harlequin Flower<sup>2017</sup>  
*Trifolium sp.*, a clover<sup>2001</sup>  
*Ulex europaeus*, Gorse (Furze)<sup>2017</sup>  
*Veronica arvensis*, Wall Speedwell<sup>2017</sup>  
*Vicia disperma*, French Tiny Vetch<sup>2017</sup>  
*Vicia sativa*, Common Vetch<sup>2020</sup>  
*Vulpia bromoides*, Squirrel-tail Fescue<sup>2017</sup>  
*Watsonia ?meriana* var. *bulbillifera*, Bulbil Watsonia<sup>2001</sup>

## Notes concerning some of the plant species

Listed as Critically Endangered under Victorian law

*Platylobium infecundum* (a flat-pea) – Abundant, the dominant or co-dominant groundcover over much of the reserve.

Listed as Endangered under Victorian law

*Acacia stictophylla* (Dandenong Range Cinnamon Wattle) – After dwindling in numbers and health for years, the last known plant was recorded as close to death in 2017 and none have been recorded since despite the author's targeted search in 2024. Seedlings may well emerge after fire or soil disturbance.

*Austrostipa rudis* subspecies *australis* (a veined spear-grass) – A thriving population (re-confirmed in 2024), estimated to contain at least several dozen plants when last counted (in 2017). The other sites in Knox with substantial populations of the species are Bayswater Park, Lewis Park, W.G. Morris Reserve, the Bateman Street Bush and the unmade eastern section of Police Rd, Rowville. Blamey Reserve provides a more secure location than most other sites, so its substantial population does make a material contribution to the species' survival in Knox.

Locally-threatened

*Arthropodium milleflorum* (Pale Vanilla-lily) – A single cluster of three plants was recorded in the last full botanical survey (2017). The only other plants in Knox are in Lysterfield Park and on the municipal boundary in The Basin, where they are much more secure and possibly represent a different, currently undescribed species;

*Diuris orientis* (Wallflower Orchid) – Approximately 35 plants were seen in spring 2016 but most were soon pulled out or otherwise damaged by flower-pickers. The only other known population in Knox is Bateman Street Bush, where approximately 120 were recorded in spring 2016 and were again decimated by people pulling them out;

*Eucalyptus polyanthemos* (Red Box) – Dominant in the reserve, with roughly 50–100 individuals. Around half that number are scattered around the immediate neighbourhood, but otherwise absent from anywhere south of Maroondah Highway.

*Hardenbergia violacea* (Purple Coral-pea) – A few dozen were found in 2017, which is one of the largest populations of any reserve in Knox. Some were seen in 2024 without looking hard. Because the species is becoming scarce in Knox, seed collectors have been taking most of the seed away from the reserve, threatening the species in the medium term;

*Hovea heterophylla* (Common Hovea) – Approximately ten individuals were counted in 2017, which has become a substantial number for a site in Knox. In 2016, seed collectors took away most of the species' seed, which is produced in such small numbers that the species cannot afford to spare any.

*Indigofera australis* (Austral Indigo) – Approximately 20 plants were found in 2017, which is one of the largest populations of any reserve in Knox. Some were seen in 2024 without looking hard;

*Kennedia prostrata* (Running Postman) – two observed on 18/7/04 in a quick inspection, 20 months after a fire.

*Thelymitra ixioides* var. *ixioides* (Dotted Sun-orchid) – A colony of five plants was found in 2001.

*Wurmbea dioica* (Common Early Nancy) – Four plants seen in 2001. This cryptic species may have simply escaped detection in subsequent years.

### Fauna habitat features

- The site appears from incidental observations to have mediocre birdlife, but no formal survey has been done. Nesting activity seems scarce;
- Thickets of dense shrubs are good habitat for small birds but the isolation of the reserve from other understorey minimises the benefit of this;
- There are mature trees with hollows that may be used by birds, possums, bats and invertebrates. Nest boxes have also been installed;
- The groundcover, logs and forest litter provide extensive habitat for skinks;
- The ant fauna seems superficially to be rich, but no survey has been conducted to determine if this is significant.

### 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).

#### *Richness of Flora*

In the context of Knox, the c. 90 indigenous plant species recently recorded for the reserve is a high number for one hectare of a single vegetation type. The standard criteria do not provide recognition of sites that stand out in this regard at a municipal scale, but vegetation ecologists would usually regard this as Locally significant.

#### *Regionally Threatened Ecological Vegetation Class*

The site's vegetation best matches Valley Heathy Forest, which is listed by the Department of Energy, Environment & Climate Action as Endangered in the Gippsland Plain bioregion. Appendix 3 of *Victoria's Native Vegetation Management – a Framework for Action* (NRE 2002a) states that vegetation of an Endangered EVC is of Very High conservation significance if the habitat score (as outlined by Parkes *et al.* 2003) is at least 0.4, which the 2017 management plan found to be the case. Criterion 3.2.3 translates this 'Very High' rating to **State** significance.

The significance of the vegetation at Blamey Reserve is higher than would be attributed to a similar area of typical Valley Heathy Forest because Red Box dominates the tree canopy and (to a lesser degree) because Black Sheoak dominates the lower tree stratum.

#### *Threatened Plants*

The flat-pea, *Platylobium infecundum*, is abundant in Blamey Reserve – often the dominant or co-dominant groundcover species. It is listed under the *Flora and Fauna Guarantee Act* as Critically Endangered and it does not occur outside Victoria. As a result, the habitat provided for *Platylobium infecundum* qualifies for **National** significance under criterion 3.1.2.

The Dandenong Range Cinnamon Wattle (*Acacia stictophylla*) appears to have died out but seedlings may well emerge following fire or soil disturbance. That species is listed as 'Endangered' in Victoria and it does not occur outside Victoria. If Blamey Reserve is treated as still providing habitat for the species (on the basis of potential future germination), that habitat qualifies for **National** significance under criterion 3.1.2.

Neither *Platylobium infecundum* or *Acacia stictophylla* had been scientifically described in 2010 when the previous edition of this report was written. As a result, the site's significance level has risen from State to National.

The spear-grass, *Austrostipa rudis* subsp. *australis*, is listed as Endangered in Victoria and it also occurs interstate. (It was not listed at the time of the previous edition of this report.) There are dozens of individuals in Blamey Reserve, not enough to be regarded as an 'important population' for the purposes of the standard criteria. In this situation, criterion 3.1.2 assigns **State** significance to the habitat.

Blamey Reserve's populations of the locally-threatened plant species *Eucalyptus polyanthemos* and *Diuris corymbosa* are large enough to be regarded under the standard criteria as 'important populations', locally. Criterion 3.1.5 treats such populations as having **Local** significance. Several others of the reserve's locally-threatened plant species probably deserve recognition as 'important populations' in Knox. Even if not, they are among many of the reserve's other locally-threatened plant species that have viable populations, again meeting criterion 3.1.5 for a site of **Local** significance.

## Threats

The following are the main pressures currently threatening to lessen the reserve's conservation significance, in no particular order:

- Human-induced climate change, which is predicted to cause more severe droughts, heatwaves, fires and storms, as well as substantially lower rainfall (particularly in winter);
- Loss or decline of plant species whose populations are so small that they are vulnerable to inbreeding, poor reproductive success or elimination by incidents such as cubby house construction or digging by dogs;
- People picking flowers, particularly of orchids;
- Eucalypt disease and deaths, particularly affecting Red Stringybarks (*Eucalyptus macrorhyncha*);
- Displacement of indigenous flora and fauna by environmental weeds, exacerbated by debilitation of the native vegetation by the impacts of climate change;
- Trampling.

## Strategic planning

- This site is covered by Schedule 2 of the Environmental Significance Overlay (ESO2) as a result of the previous (2010) edition of this report, which cited the State significance of the regionally-endangered Valley Heathy Forest. Since then, *Platylobium infecundum* and *Acacia stictophylla* have been scientifically described as species and recognised to be threatened globally, raising the site's biological significance to the National level. Also since 2010, *Austrostipa rudis* subsp. *australis* has been listed as Endangered. Despite these changes, ESO2 remains an appropriate protective instrument. Although not at all urgent, it would be desirable to very slightly amend the ESO2 boundary to match the property boundary in the current digital state cadastre;
- The whole reserve and its surroundings are covered by the Significant Landscape Overlay (SLO) and the Design and Development Overlay (DDO). The surroundings are covered by ESO3;
- The reserve is larger than 0.4 ha and therefore does not qualify for the size-based exemption from the state-wide baseline planning controls over removal of native vegetation (clause 52.17);
- The reserve is zoned Public Park and Recreation (PPRZ) and is surrounded by Neighbourhood Residential Zone – Schedule 1 (NRZ1).

## Information sources used in this assessment

- Six quadrat records (N13165–70) and other plant records, from Andrew Paget in April 1985 (Paget 1985) (but note that the record of *Eucalyptus dives* is erroneous);
- An ecological survey undertaken by Dr Lorimer for at least six hours in September–November 2001 for the first edition of this report. This included a description of the vegetation composition, compilation of a list of indigenous and introduced plant species, incidental fauna observations and checks for fauna habitat, ecological threats and management issues;
- Detailed mapping of rare plant populations and the vegetation's ecological condition in the report, 'Fire in Knox Bushland Reserves 2001' by Dr Lorimer for Knox City Council;
- An inspection of the reserve's vegetation by Dr Lorimer for 25 minutes on 16th July 2004 to check on the effects of recent burning;
- A brief inspection of the reserve by Dr Lorimer on 28th June 2024 for this edition, focusing on changes to vegetation condition or the populations of significant plant species;
- Records of flora and fauna observations stored in the Atlas of Living Australia;
- The Victorian Government's 'NatureKit' website;
- Aerial and satellite imagery from between 1946 and 2024;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.