Site 104. Ferntree Gully Ridge

A treed residential area on a prominent ridge.

Summary of significant features:

- Locally significant: many trees that facilitate movements of birds, bats, tree frogs and flying insects around the local landscape in pursuit of their daily and seasonal needs;
- Locally significant: viable populations of locally-threatened indigenous tree species.

Map – See page 642.

Boundaries

This 49.7-hectare site is labelled '104' and shaded orange on the map on p. 642. It does not include Site 3 (The Avenue Reserve, Ferntree Gully – see p. 18) that lies at its southern tip. The boundary aligns with property boundaries except where it crosses roads.

The version of this site that appeared in previous editions of this report was based on the author's vegetation survey in 2003. In this edition, some land has been added and some excised, with a net increase of 2.3 ha. The reasons for the changes are as follows:

- 59 The Avenue has been transferred from Site 3 to Site 104 because its previously rich indigenous flora has been mostly destroyed (as determined by viewing from the adjacent The Avenue Reserve);
- Over the intervening 22 years, many trees have grown substantially larger and form superior habitat, meaning that some peripheral areas have become worthy of adding to the site (e.g. Craig Avenue and Hillcrest Avenue); and
- Habitat has been lost in a few small areas on the periphery.

Land use & tenure: Freehold residential land and associated streets.

Site description

This site includes a prominent, 1.1-kilometre-long ridge and a small part of the Blind Ck valley, the latter being at the site's northern end. The southern end skirts Site 3, 130 m from Ferny Ck.

The ridge is formed from a band of hornfels, created where Lower Devonian siltstones became 'baked' by contact with magma from the Dandenong Ranges volcanic system during the Upper Devonian Period. The subsoil is clay and the topsoil is a shallow clay loam.

Francis Crescent (just southwest of Blind Ck) follows the foot of the ridge. To its north and east, the topsoil is alluvium that has been deposited by floodwaters of Blind Ck and some of its tributaries.

The site stands out on a satellite photograph as more heavily vegetated than its surroundings. This is because many properties have large trees. A significant proportion of the trees are remnant eucalypts. On the ridgetop, the dominant remnant eucalypts are Messmate Stringybark (*Eucalyptus obliqua*) and Bundy (*Eucalyptus goniocalyx*) – an excellent species for fauna habitat. There are also many planted trees that are native to other parts of Australia, which generally have greater habitat value than trees from other continents.

Remnant trees of Blackwood (*Acacia melanoxylon*) and Cherry Ballart (*Exocarpos cupressiformis*) are moderately common. Other remnant understorey plants are quite sparse and concentrated on 59 The Avenue, which had vegetation of State biological significance until it was mostly cleared for residential use over the past 15 years.

The tree canopy appears to provide basic habitat needs for native birds, bats, possums, tree frogs and insects.

Relationship to other land

The site provides a treed link between the Blind Creek habitat corridor (Site 33) and the Ferny Creek habitat corridor (part of Site 66). It may serve as a corridor for fauna movements between the two creeks but there is no observational data to test that hypothesis.

It is also apparent from the map on p. 642 that the site abuts the Dandenong Ranges Buffer area (Site 99) and is close to several other sites of biological significance, particularly the railway corridor (Site 88), Koolunga Native Reserve (Site 5) and the Vaughan Road bushland (Site 6). The Dandenong Ranges National Park is 900 m away.

The author observed substantial numbers of parrots on the Ferntree Gully ridge, beyond what could be supported by the ridge on its own. This indicates that the parrots move through the area and rely on other areas to fulfil some of their habitat requirements. In this sense at least, the site may function as either a habitat corridor or an ecological 'stepping stone'.

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).

Ecological Integrity and Viability

The probable value of the site as a corridor or ecological 'stepping stone' fits the description 'Important at local scale - Link between individual remnant habitat blocks or within subcatchment', to which criterion 1.2.6 of Amos (2004) attributes **Local** significance.

Locally-threatened plant species

The site's remnant tree species are locally threatened. Most or all of them (other than Red Stringybark, *Eucalyptus macrorhyncha*) have viable populations in combination with neighbouring native vegetation. Such occurrences meet criterion 3.1.5 for a site of **Local** significance.

Threats

- Loss of canopy trees due to residential subdivision and development;
- Human-induced climate change, which is predicted to cause more severe droughts, heatwaves and storms, as well as substantially lower rainfall (particularly in winter);
- Debilitation and deaths of trees, partly due to the abovementioned droughts and storms;
- Lack of natural replacement of indigenous species as they die.

Strategic planning

As a result of the previous (2010) edition of this report, Schedule 4 of the Vegetation Protection Overlay (VPO4) applies to the slightly different version of the site that was delineated at that time. The stated reasons for applying VPO4 were that:

- It contains (in the words of the VPP Practice Note on Biodiversity) 'scattered living food trees with an exotic understorey';
- It is a site of Local biological significance;
- Most of the properties involved are too small to be affected by Clause 52.17 of the Knox Planning Scheme, which might otherwise provide some of the trees with some protection; and
- Some of the habitat trees are not native to Victoria and are therefore not protected by Clause 52.17.

These features are equally valid for the current version of the site. There is no need to alter the text of VPO4 but it is recommended here to amend the VPO4 boundaries to match the ones here, as long as the small benefit from doing so justifies the effort.

Information sources used in this assessment

- An inspection of the area by Dr Lorimer in 2003 for the specific purpose of finding sites of biological significance and determining the distribution of trees that represent reasonable habitat for native fauna;
- General observations by Dr Lorimer in 2023–2024 while surveying The Avenue Reserve (Site 3), the Blind Creek Corridor (Site 33) and the railway corridor (Site 88);
- A vegetation survey of the site for this edition on 19th January 2025, on foot and by car, including redetermination of the site's boundary;
- A search in vain for records of flora and fauna observations stored in Knox City Council's biodiversity database;
- Records of flora and fauna observations stored in the Atlas of Living Australia;
- Aerial and satellite imagery from between 1946 and 2025;

- The Victorian Government's 'NatureKit' website;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.