

Gramatan Avenue Heathland Sanctuary

MANAGEMENT PLAN



Bayside
CITY COUNCIL

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Gramatan Avenue Heathland Sanctuary is an important link in Sandringham's bushland and open space network. Its remnant heathland retains significant species and the potential to regenerate into a fine example of the City's floral heritage.

The heath in Gramatan Avenue was formally widespread and abundant

within the south-eastern suburbs of Melbourne and is now considered rare, restricted to isolated remnants. As such the Sanctuary has local, regional and state significance. Its cultural heritage reflects the growth of a conservation ethic in Sandringham in the 1950s through to the current management format. It is a popular reserve with an active Friends group.



Gramatan Avenue Heathland Sanctuary is to be preserved and maintained as a 'living museum' as an example of a remnant indigenous vegetation community that was once widespread across the region. The issue of access into Gramatan Avenue Heathland Sanctuary illustrates the complexities that surround remnant heathland in urban areas. The size of Gramatan Avenue Heathland Sanctuary, especially the perimeter to area ratio (edge effect), renders the Heathland

particularly vulnerable to disturbance. Open access for all through Gramatan Avenue Heathland is considered inappropriate at this time, due to the risk uncontrolled open access poses to the floral and faunal communities.

Interpretation and education is vital to communicate to the community the reasons for restrictions imposed on access into Gramatan Avenue Heathland Sanctuary.



Background

Gramatan Avenue Sanctuary is located between Gramatan and Sunset Avenues in Beaumaris. Its dimensions are 25metres x 55metres with 1.8-metre firebreaks on the east and west boundaries. The Sanctuary has a gentle slope running from north-east to south-west and the elevation ranges from approximately 16m to 21m. It is approximately 20 kilometres south of the Melbourne GPO.

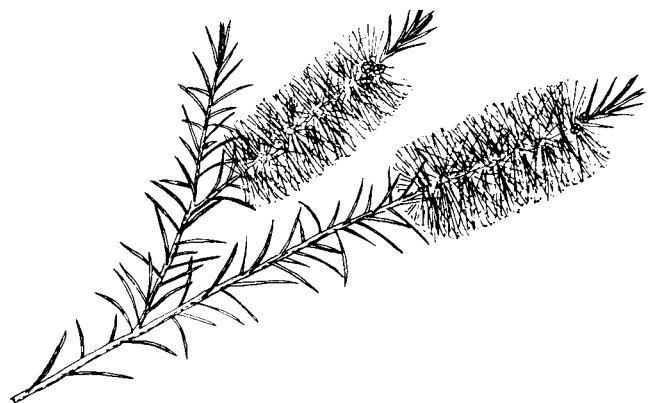
Council has owned the property since 1956. Prior to this, in 1954, botanists from the National Herbarium and Melbourne University had lodged appeals for reservation of the land due to its botanical significance. It was leased to the Beaumaris Conservation Society, formally the Beaumaris Tree Preservation Society, in 1960. This lease expired in 1990 and Council resolved to accept management responsibility for the area.

The Sanctuary retains the typical structure of heath vegetation developed on deep nutrient poor siliceous sandy podsol soils. An open canopy of Silky Tea-tree (*Leptospermum myrsinoides*) with occasional Silver Banksia (*Banksia marginata*) and rare Green Sheoak (*Allocasurina paradoxa*) occurs over a dense lower stratum of small shrubs and herbs. There are 14 significant plant species recorded for the Sanctuary, two of which are found nowhere else—Slender Sword-sedge (*Lepidosperma gunnii*) and the Slender Onion-orchid (*Microtis parviflora*).

Gramatan Avenue was once invaded by Coast tea-tree (*Leptospermum laevigatum*), most of which has now been cleared. Some areas of the Sanctuary have also been severely degraded by weed invasion.

There appears to have been a decline in species diversity where some, and possibly many, species have been reduced to critically low numbers or may have died out completely. Many of these species may still be present in the soil as soil stored seed.

Two burns have been conducted within the Sanctuary, one in 1993 and one in 1998. The 1993 burn was in the northern section of the Sanctuary and another burn was carried out in the southern part of the Sanctuary in 1998, followed by intensive handweeding. This has produced excellent results with significant increases in indigenous species present as well as a reduction in weed species present. Burnt sites show, on average, 41% more indigenous species compared to unburnt sites (Cropper 1996). The use of fire is critically important in maintaining this type of heath vegetation.



Vegetation Management

SIGNIFICANT SPECIES

Significance in a biological context has a similar meaning as in general use—significant being defined as meaning noteworthy or of considerable importance. Vegetation at Gramatan Avenue Sanctuary is very rare locally, and rare regionally (Carr et al 1991). Therefore to monitor, conserve and to provide effective management of the vegetation within the Heathland is a high priority.

Screens of vegetation for aesthetic reasons between the Heathland and abutting residential properties gives rise to potential conflicts with fire and safety issues. Nature-strip planting and signage, especially on the Sunset Avenue side, is required to identify the area as a Heathland Sanctuary and to protect the Heathland landscape character.

External vegetation, such as fruit trees growing in abutting properties, need to be maintained in such a way as to not deleteriously effect the Heathland.

WEED CONTROL

Weed control within the Heathland is an ongoing issue and weed control within the Heathland should be carried out in

accordance with Council contract specifications and updated annually during the specification review.

Fauna Management

Further surveys are required within the Heathland to determine what species are present within the Heathland and which of these species are significant (Pavey 1996). Once identified, management strategies can be established to best manage these species and the floral communities in which they occur (Carr et al 1991).

Fire Risk Management

Fire management within Gramatan Avenue Heathland is also an ongoing issue. Firebreaks are annually inspected by MFB and fire regimes should/will be conducted in accordance to Carr et al (1991) and established with Council contract specifications.

Ecological Fire Regimes

Regenerative burns have been successfully carried out within Gramatan Avenue Sanctuary, with burn sites showing on average 41% more indigenous species compared to unburnt sites. The use of fire is critically important in maintaining this type of heath vegetation. Cropper (1996) recommends



Issues

that the northern part of the Heathland not be burnt again until after 2005.

Access

The issue of access into the Heathland illustrates the complexities that surround remnant Heathland in urban areas. The biggest threat to remnant vegetation is vandalism, trampling of vegetation and wildfire. The size of Gramatan Avenue Heathland Sanctuary, especially the perimeter to area ratio (edge effect), renders the Heathland particularly vulnerable to disturbance.

As the primary management aim of the Heathland is to preserve the biodiversity of indigenous plant species, the Heathland is seen to provide an area for purely passive appreciation and at this time, never for recreation (Carr et al 1991).

Therefore, open access for all through Gramatan Avenue Heathland is considered inappropriate at this time,

due to the risk uncontrolled open access poses to the floral and faunal communities.

Promotion and Awareness

To alleviate any potential conflict that may arise due to exclusion fencing of the Heathland, specific and detailed interpretative signage should be erected on both sides of the Heathland, explaining the reasons for the fencing and the importance of preserving the Heathland.

Increased promotion of Gramatan Avenue Heathland may increase general awareness of the importance of such reserves and eventually result in reduced fencing and greater access to these areas.

In the mean time, appreciation of the Sanctuary can be increased through re-establishment of active working bees, increased promotion through local papers and guided walks.



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Management

PRESCRIPTIONS

It is expected that a review of the management plan and expert advice will be conducted every three years.

High Priority Actions

- 1.1 Conserve the Silky Tea-tree Heath in accordance with Carr et al (1991).
- 1.2 Conduct fauna surveys, ensuring that vertebrates and invertebrates are included.
- 1.3 Develop a revegetation program and strategy.
- 1.4 Retain the Coastal Tea-tree in the northwest corner as fauna habitat and likely site of orchid re-introduction.
- 1.5 Monitor the amount of weed invasion occurring due to the presence of the Coastal Tea-tree on the Site. Gradually replace with tall Heathland species if the Coastal Tea-tree is having a significant impact on the site.
- 1.6 Implement weed control as detailed overleaf. Where practical, handweed in and around clumps of indigenous species leaving the ground bare and where appropriate, use small amounts of indigenous mulch around indigenous species for weed suppression.
- 1.7 Install interpretative facilities to communicate importance of restricting access to the Sanctuary and highlighting the importance of conserving the Heathland.

- 1.8 Make the site available to visitors particularly local residents, for viewing in the following ways:
 - 1.8.1 By arrangement with the Friends of Gramatan Avenue group;
 - 1.8.2 Holding of Open Days at the Sanctuary;
 - 1.8.3 Establish a systems of contacts with keys for access;
 - 1.8.4 Supervise visitors.
- 1.9 Landscape the Sunset Avenue nature-strip in similar way to the Gramatan Avenue frontage.

Medium Priority Actions

- 2.1 Conduct a Fauna Survey within the Sanctuary.
- 2.2 Develop a Fauna Management Strategy from the results of the fauna surveys.
- 2.3 Establish control plots and photo prints to monitor progress and maintain a systematic photographic record of the Sanctuary.

Low Priority Actions

- 3.1 Design and implement a survey to obtain comments from residents regarding the Sanctuary.
- 3.2 Maintain the pathway in the current position and monitor the surface for effective weed suppression and efficient maintenance.
- 3.3 Include Sanctuary in any Neighbourhood Watch Program.

Zone 1

Gramatan Avenue nature strip shall be 80 per cent free of weeds and 95 per cent free of weeds mature enough to set seed.

Zone 2

Shall be 95 per cent free of weeds, especially *Hypochoeris radicata*, *Holcus lanatus*, *Allium triquetrum*, *Rubus* sp, *Pittosporum undulatum*, *Acacia sophorae*, *Ehrharta longiflora*, *Vulpia* spp., *Briza maxima*, *Ehrharta erecta*, *Briza minor*, *Pennisetum clandestinum* and *Stenotaphrum secundatum*.

Annual removal of *Cassityha pubescens* within total area.

Zone 3

Shall be 80 per cent free of weeds.

Zone 4a

Shall be 80 per cent free of weeds.

Zone 4b

Shall be 80 per cent free of weeds and 95 per cent free of weeds mature enough to set seed.

Zone 5

Shall be 50 per cent free of weeds and 95 per cent free of the following weeds mature enough to set seed—*Vulpia* spp. (within 1 metre of inner edge of zone), *Ehrharta longiflora*, *Briza maxima* and *Holcus lanatus*.

Zone 6

Shall be 95 per cent free of weeds, especially *Hypochoeris radicata*, *Holcus lanatus*, *Allium triquetrum*, *Rubus* spp., *Pittosporum undulatum*, *Acacia sophorae*, *Ehrharta longiflora*, *Vulpia* spp., *Briza maxima*, *Briza minor* and *Agrostis capillaris*.

Zone 6a

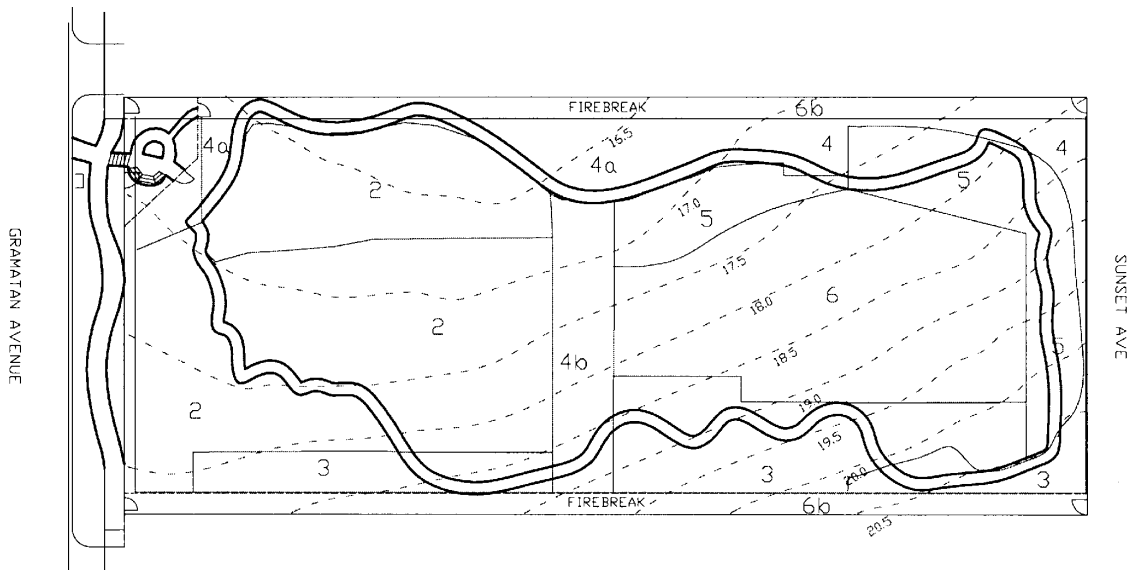
All internal pathways to be 95 per cent free of weeds. The pathway shall be clear of all vegetation to a width of 0.5 metres and a height of 1.8 metres.

Zone 6b

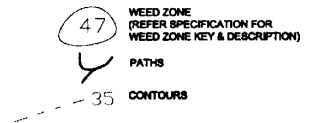
All fire breaks to be 95 per cent free of weeds. All firebreaks shall be clear of vegetation to a height of 2.5 metres.



Mapped Details



LEGEND



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