

**BOTANIC GARDENS TRUST
DRAFT PESTICIDE USE NOTIFICATION PLAN**

1. INTRODUCTION

This Pesticide Notification Plan has been prepared in accordance with the *Pesticides Regulation 1995*.

The Botanic Gardens Trust (the Trust) has extensive plant collections of international and national significance and is committed to sustainable horticultural practices. The Trust's Statement of Environmental Commitment is shown as APPENDIX 1. The Trust's Towards Sustainable Horticulture Statement is shown as APPENDIX 2.

On the Trust Estates pest control is implemented using Integrated Pest Management principles. This is based on growing healthy plants in a healthy environment. This internationally accepted method encourages natural predators and plant health and vigour to control most pest and diseases. Chemicals may be used as part of this management practice. Their use is kept to the lowest practical levels using the lowest toxicity chemicals registered for the weed, pest or disease to be controlled when this is the most environmentally sustainable option.

The Trust has significantly reduced the use of chemicals and pesticides on its Estates since the year 2000. Most of the Trust lands now do not have pesticides used on them. On those occasions when pesticides are used, this mainly consists of applying insecticides to manage certain difficult insect pests, applying herbicides for weed control and spot use of fungicides. Such uses occur between 40 and 50 times per year. Other occasional pesticide use may consist of placing baits for rodent control.

If the Trust needs to apply pesticides, the public has generally always been notified of the use and the time necessary for their exclusion from these spaces. In the case of the Gardens at Mount Annan and Mount Tomah, this is via information available at the public entry gate for each Garden. In the Sydney Gardens where there are numerous entry points, notification has generally been localised to the areas to be treated.

2. PUBLIC PLACES COVERED BY THIS NOTIFICATION PLAN

The Trust uses or allows the use of pesticides in the following categories of outdoor public places that it owns or controls:

- Public gardens
- Parks
- Playgrounds
- Sporting fields
- Road verges and reserves
- Laneways and pathways
- Drains
- Non accessible forest/bushland areas
- Urban Roads

Pesticide	Area of use (All Estates unless noted)	To control
Glyphosate	All areas	Weeds
Sierraron	Mount Annan Botanic Garden	Pre-emergent olive seedlings and weed seed
Garlon	Mount Annan Botanic Garden weed monoculture forest areas	Mature olive basal bark application
Pest Oils (e.g. Healthy Earth, Eco Oil, Clear White Oil etc.)	Nursery and garden areas.	Mites, aphids, scale, general insect control.
Clensil	Nursery areas (Royal Botanic Gardens)	Mites, aphids, thrips.
Confidor	Shadehouse, nursery areas.	Insects
Dipel	Nursery and garden areas.	Leaf Caterpillar
Alliette fungicide	Soil drench, nursery quarantine areas.	Phytophthora, phythium.
Diazanon	Nursery Mount Annan Botanic Garden – Required use on small quantities of commercial plant material just prior to export to WA and SA	Systemic insecticide.
Proplant fungicide	Nursery and plant production areas	Plant fungal attack
Spearhead	Lawns	Selective broadleaf weed control
Sportsground	Lawns	Selective broadleaf weed control
Monument	Lawns	Kikuyu control in couch grass lawns.
Brigade	Lawns	Control of army worm
Fusilade	Garden beds	Couch grass control in garden bed areas.
Starane	Native grassland, open bushland MABG	St Johns Wart
Brushoff/Bushwacker	Bushland, native grassland areas MABG	Blackberry, olive seedlings
Confidor C5	Fig arboretum MABG	Fig leaf beetle
Pyrethrum	Garden bed and nursery areas	Beetles, insects.

Except as may otherwise be specified in this plan, the Trust will provide notice to the community concerning all pesticide applications in these public places.

Similar notification arrangements will apply to pesticide use by Botanic Gardens Trust staff whilst working on the Art Gallery of New South Wales, Australian Museum and Sydney Opera House properties.

3. WHO USES THESE PUBLIC PLACES AND HOW WILL NOTIFICATION OCCUR?

The Trust's estimate of the main regular user groups and level of use for each of the categories of public place is summarised for each Estate in the following tables.

Royal Botanic Gardens and Domain

Public Place	Regular user groups							Level of use			Notification via			
	General public	Sports teams	Tourists	Families and Children	Event attendees	Contractors	Staff	High	Medium	Low	Website Notification	Site signage	Site delineation	Staff email
Public gardens	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Parks	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Playgrounds	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Sporting fields	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Road verges and reserves	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓
Laneways and pathways	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓
Drains						✓	✓				✓	✓		✓
Urban Roads	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓

Mount Annan Botanic Garden

Public Place	Regular user groups							Level of use			Notification via			
	General public	Sports teams	Tourists	Families and Children	Event attendees	Contractors	Staff	High	Medium	Low	Website Notification	Site signage	Site delineation	Staff email
Public gardens	✓		✓	✓	✓	✓	✓	✓				✓		✓
Playgrounds	✓			✓				✓				✓	✓	✓
Road verges and reserves	✓			✓	✓	✓	✓		✓			✓		✓
Laneways and pathways	✓			✓	✓	✓	✓		✓			✓		✓
Drains							✓			✓		✓		✓
Non accessible forest/bushland						✓	✓			✓				✓

Mount Tomah Botanic Garden

	Regular user groups							Level of use			Notification Via			
	General public	Sports teams	Tourists	Families and Children	Event attendees	Contractors	Staff	High	Medium	Low	Website Notification	Site signage	Site delineation	Staff email
Public Place														
Public gardens	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
Road verges and reserves	✓		✓	✓	✓	✓	✓		✓			✓		✓
Laneways and pathways	✓		✓			✓	✓		✓			✓		✓
Drains						✓	✓			✓		✓		✓
Non accessible forest/bushland						✓	✓			✓				✓

Whenever a pesticide is applied by the Trust and its contractors on its lands, the Trust will provide notice by a variety of methods:

- Information will be posted on the web site for all pesticide use on Trust lands.
- For the Royal Botanic Gardens, signs will be erected in relevant locations prior to the application of the pesticide, advising visitors of the chemical used and any subsequent exclusion/re-entry period.
- At Mount Annan and Mount Tomah Botanic Gardens, information will be available at the entry point and signs will be placed prior to the application of the pesticide advising visitors of the chemical used and the subsequent exclusion/re-entry period.
- Site delineation via fencing and/or placement of witches hats to advise/deny access will be used to restrict access to the site whilst the application is in progress and during any exclusion/re-entry period for pesticide uses.
- For broad acre applications in non-public use areas at Mount Annan Botanic Garden, informational signage will be erected at the nearest access point.
- Emails will be sent to all staff at the respective Garden prior to the application to advise of the timing, chemical used, exclusion/re-entry period for their own protection and for dissemination of this information in response to any queries raised by user groups.

The Trust uses small quantities of some pesticides that are widely available in retail outlets and ordinarily used for domestic purposes (including home gardening).

The Trust does not intend to provide notice for such pesticide applications other than by way of description in this plan or general information provided on the website. This will apply to minor control of indoor and outdoor insect pests using baits or aerosol spray cans and spot weed control using a wick wipe wand or hand bottle.

These notification arrangements are based on Trust's assessment that:

- The notice provided should reflect the level of use of a public place, the extent to which the public may directly encounter a pesticide use and the type of pesticide use.
- Access to the Trust website is now readily available and with education, regular users may be inclined to check the website in the first instance.
- Signs are the most effective way to advise people of chemical usage when used in the appropriate location. Signs will carry both text and use of internationally accredited pictograms to advise that the area is a no entry zone. Generally low toxicity chemicals are used and visitors are excluded from the area for withholding period as per label instructions.
- Education (via email) of other staff who are working on the site is used to supply information that assists in the education process of user groups.
- Denial of physical access to the site (where practical) where the pesticide is being applied is the only method to exclude the users groups from the site or alternatively the placement of specially marked 'witches hats' to delineate the area to be treated, supported with appropriately worded/symbolised exclusion notices

All three Gardens have their own unique characteristics (It is for this reason that public place categories are listed as having high visitation rates although this can vary depending on weather, time and actual location). Notification arrangements take this into consideration without compromising the health and safety of user groups or staff.

In particular, this affects the access points at which user groups could be advised of any pesticide applications. At Mount Annan and Mount Tomah, with only one public access point this is relatively simple via the erection of a sign. A notice can also be provided at the entry booth where Garden entrance fees are paid. In the Royal Botanic Gardens there are numerous entry points, so the most effective notification will be via the use of signs near the location of the pesticide application.

4. WHAT INFORMATION WILL BE PROVIDED?

All forms of notification proposed for the Trust's lands outlined in this Plan will contain the following information:

- The full name of the pesticide used as it is listed on the pesticide label;
- The purpose of the application, including the pest that is being treated;
- Date(s) that the pesticide was applied (or in the case of prior notification, the date on which the pesticide will be applied);
- Product specific warnings on the subsequent use of the land/exclusion period;
- Contact details for The Trust and/or the pesticide operator.

A typical example of the type of notification format is shown as APPENDIX 3.

5. HOW THE COMMUNITY WILL BE INFORMED OF THIS PLAN

The Trust will consult with the community on the draft Notification Plan, including the types of public places covered and the proposed notification methods.

The draft Notification Plan will be placed on public display for four weeks at The Trust offices and a notice will be published in the Government Gazette, the Sydney Morning Herald and local print media for Mount Annan and Mount Tomah advising that the Plan is available for public comment.

A copy of the draft Plan will also be available on the Trust's website.

The Trust will consider all comments from the community prior to finalising the Plan.

The Trust will advise residents of the contents of the final Notification Plan by:

- A written reply to each submission received during the exhibition/comment period detailing the action taken from the submission received.
- Making a copy of the Notification Plan available for public viewing in the Trust's offices;
- Placing a copy of the Plan on the Trust website.

6. FUTURE REVIEWS OF THIS PLAN

The Notification Plan will be reviewed every five years. The review will include:

- Report on progress of implementing the Notification Plan;
- Public consultation on the notification methods outlined in the Notification Plan;
- Recommendation for amendments (if applicable) to the Notification Plan.

7. RELATED LEGISLATION

- Pesticides Act 1999 (as amended)
- Pesticides Regulation 1995 (as amended)
- Occupational Health and Safety Act 2000
- Occupational Health and Safety Regulation 2001
- Protection of the Environment Operations Amendment Act 2005
- Protection of the Environment Operations (General) Regulation 1998
- Native Vegetation Conservation Act 1998
- Royal Botanic Gardens and Domain Trust Act 1980

8. CONTACT DETAILS

Anyone wishing to contact The Trust to make comment on the draft Notification Plan or to obtain details of specific details of pesticide applications in public places should contact:

Manager Domain and Infrastructure Botanic Gardens Trust

Mrs Macquaries Rd
Sydney 2000
Phone 02 9231 8103
Facsimile 02 9251 4403
Email brad.horan@rbgsyd.nsw.gov.au

Assistant Director Mount Annan Botanic Garden

Mount Annan Drive
Mount Annan 2567
Phone 02 4634 7901
Facsimile 02 4648 2465
Email caz.mccallum@rbgsyd.nsw.gov.au

Assistant Director Mount Tomah Botanic Garden

Bells Line of Road
Via Bilpin 2758
Phone 02 4567 3013
Facsimile 02 4567 2037
Email rob.smith@rbgsyd.nsw.gov.au

APPENDIX 1

Botanic Gardens Trust

Statement of Environmental Commitment

The Royal Botanic Gardens and Domain Trust is committed to environmental responsibility in all our operations, partnerships and programs. This Trust statement elucidates our commitment to act in ways that protect the environment.

The mission of the Botanic Gardens Trust is to inspire the appreciation and conservation of plants.

The Trust supports the principles of Ecological Sustainable Development (ESD), i.e.

- To meet the needs of the present without compromising the ability of future generations to meet their own needs.
- To protect biological diversity and maintain essential ecological processes and life-support systems.
- To integrate both long and short-term economic, environmental, social and equity considerations.

The Trust is committed to achieving best practice in environmental management by:

- Protecting and enhancing the natural and heritage elements of our sites.
- Ensuring our site management does not degrade the quality of water leaving our gardens.
- Conserving water and implementing recycling wherever practicable.
- Minimising consumption of resources, encouraging recycling, purchasing recycled content products and minimising waste.
- Remediating any legacy of past practices to ensure the Trust lands and assets are in a sustainable condition.
- Managing known and potential weeds and pathogens, and preventing their spread beyond our site.
- Practising efficient energy use, incorporating the most energy efficient facilities and sustainable forms of energy where practical.
- Managing fauna and flora to enhance biodiversity and visitor enjoyment.
- Practising environmentally sound pest management, including Integrated Pest Management (IPM).
- Incorporating sustainable values and ensuring that all developments and ongoing operations are in keeping with the principles of Ecologically Sustainable Development (ESD).
- Applying our environmental criteria across all Trust operations including contracts and professional consultancy.
- Ensuring that all events staged on Trust lands operate in an environmentally responsible manner, including minimising waste, encouraging recycling and promoting use of recycled products.
- Ensuring that all staff, associates, students, volunteers and contractors are aware of our Statement of Environmental Commitment, and comply with relevant environmental legislation, government regulations, policies and agreements.
- Promoting our environmental initiatives so as to raise public understanding about best environmental responses and how to minimise environmental impacts.

This policy applies to all sites administered by Royal Botanic Gardens and Domain Trust, to all Trust staff, licensees and contractors.

APPENDIX 2

Botanic Gardens Trust TOWARDS SUSTAINABLE HORTICULTURE

Updated 10 August 2005

The mission of the Botanic Gardens Trust is *'To inspire the appreciation and conservation of plants'*.

We achieve this mission through research, horticulture, education, conservation and recreation.

In our practice of horticulture we present curated and interpreted collections of plants at our four sites; the Royal Botanic Gardens, the Domain, Mount Tomah Botanic Garden and Mount Annan Botanic Garden.

We seek to *'inspire the appreciation of plants'* not only through the horticultural presentation of our plant collection, but also by demonstrating environmental leadership in horticulture and land management.

Sustainable and Organic Horticulture

The Trust has set an objective of moving towards a more sustainable approach to our horticulture. Definitions of *sustainable* and *organic* are many and varied and we need to settle on a definition appropriate to a contemporary botanic garden.

The Trust has adopted the following aims which are also central to the definitions used by established organic groups (See appendix for definitions promoted by organic groups):

- **Minimum chemical input**
- **Integrated pest management (see IPM definition in appendix)**
- **Ensuring soil is enriched, for example through enhanced biological activity, and that it is not degraded by growing plants**
- **Use of more natural fertilisers.**

Botanic gardens differ from organic farms and organic domestic horticulture in several ways. They present long-lasting plant collections on specific and defined themes, and they do not mass-produce plants or food.

One of the hallmarks of a respected contemporary botanic garden is a high standard of horticultural presentation, including plants with minimal pest and disease damage, few weeds, optimum plant vigour and extensive, and relatively weed-free, lawn areas.

At each of our four sites we grow a large diversity of plants, many of which are outside their best climate and growing conditions, and as such, require specific nurturing for optimal presentation. While adopting sustainable horticultural practices, we are also committed to retaining our position as a leading international botanic garden presenting a diversity of plants to a high horticultural standard.

Taking this into account, we have adopted a fusion of the best and most practical organic and sustainable principles, combined with modern horticulture and science.

We have also adopted the principles of ecologically sustainable development outlined in the New South Wales Biodiversity Strategy. Thus we seek “to enhance individual and community wellbeing and welfare by following a path of economic development that safeguards the welfare of future generations; to provide for equity within and between generations; and to protect biological diversity and maintain essential ecological processes and large support systems”.

The Trust has set the following outcomes for sustainable horticulture:

1. We have a clearly articulated Sustainable Horticulture Strategy to promote our policies, strategies and initiatives to internal and external stakeholders.
2. We grow plants that are naturally less susceptible to pests and diseases in Sydney's climate;
3. We manage pest and disease outbreaks using sustainable means, including integrated pest management.
4. We train all horticultural staff in sustainable horticulture and environmental management.
5. We actively interpret our environmental principles and actions to visitors.
6. Water leaving our sites is not degraded by our horticultural activities.
7. We do not contribute to toxic residues in the soil and we ameliorate any build-up from past horticultural practices.
8. We maintain and improve horticultural presentation standards.
9. We process and re-use excess vegetation (e.g. prunings, grass clippings, branches) on site. This material is treated as a resource not as waste.
10. We manage environmental weeds so they do not spread beyond our Gardens.
11. We procure horticultural landscape materials on the basis of their whole-of-life environmental impacts.
12. To ensure transparency and accountability, there are regular, independent audits of sustainable horticultural practices and environmental management.

APPENDIX 3

Typical form of notification for pesticide usage.



Science Education
CONSERVATION
Horticulture Recreation

NOTIFICATION OF PESTICIDE APPLICATION

Date of Application –

Location –

Chemical to be Used –

Active Constituent –

Purpose for the Application –

Estimated Start Time –

Estimated Finish Time –

Exclusion Period for No Entry –

Method of Application –

Contact Officer –