



Restore
Hibiscus & Bays



June 2020

Pest Plant Control Methods and Best Practice.

Controlling environmental weeds is a big part of many of our ecological restoration projects. This document outlines methods recommended by Restore Hibiscus & Bays for best practice in pest plant control, including the controlled use of herbicide where appropriate. Following best practice will help to keep workers, volunteers, landowners and bystanders safe, as well as the environment we are working to restore. The information below is intended as guidance for newly forming groups and projects, or for individuals working on pest plant control on their own property. If working with established groups or projects, please ask your project coordinator or group leader for standard operating procedures specific to your project. Find some of the groups and projects in the Restore Hibiscus & Bays network. [Link Here](#)



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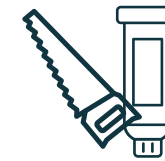
Site Safety, Equipment and Storage

As the Restore Hibiscus & Bays network carries out restoration work in a variety of different areas and habitats, we recommend that volunteer groups and projects identify the risks specific to each site and brief all individuals undertaking work. In order to minimise risk, we ask that before any work is undertaken, the project lead or health and safety representative completes a Volunteer Safety Plan. Each individual has a responsibility to themselves and others to stay safe; therefore, the paths of communication between project lead and volunteers must be clear.

Personal protective equipment is essential for the health and safety of individuals undertaking pest plant control. If using herbicides, Restore Hibiscus and Bays recommends wearing black nitrol gloves underneath gardening gloves. This considerably limits the risk of skin contact with the herbicide. For some specific plants, such as woolly nightshade and moth plant, a face mask may be needed, as these plants are poisonous to humans. Long trousers and long sleeve shirts will reduce skin contact with toxic plants, herbicide and other hazards in the field, such as UV rays. Project leads should aim to ensure that all participants have the ability to determine whether the tools and equipment that they are using are in an appropriate condition to conduct work safely and deliver agrichemicals without leaking or causing unintentional effects. The condition of tools and equipment should be monitored throughout the duration of the activity to ensure it is working safely and effectively.

All herbicides should be stored in their original manufactured containers. If in transport, the herbicide product should be isolated away from individuals, e.g. in the boot, and away from food items.

The Restore Hibiscus & Bays network uses several methods to control pest plants, depending on the experience level of the participants, the type of pest plant being controlled, the extent of the infestation and environmental factors, such as proximity to water. Please refer to the [Forest and Bird weed control guide](#) for recommended methods and herbicides to use with the most common pest plant species found within the Hibiscus & Bays Local Board area. Below, we aim to explain in more detail best practice for control methods that are most likely to be used by volunteers.



Cut and Paste

Cut and Paste is one of the more common methods for volunteers, as you are able to use the herbicide in gel form effectively without a Growsafe qualification.

This method is effective for a range of environmental weeds, including both vines and trees, whilst using the least amount of herbicide.

Cut the pest plant stem at the base closest to the roots.

Take care when cutting not just for yourself but for others around you. Apply a thin film of cut & paste herbicide (MetGel, Bamboo Buster) directly to the cut stump or stem to prevent regrowth.

Established pest plant sites with seed producing plants may need to be revisited for cut and paste maintenance every three months across a period of a year.



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Hand Removal

Hand removal can be used for small young pest plants. Simply pull or gently dig out. However, hand removal is usually only suitable if the entire root system can be removed. Soil disturbance can lead to more weeds and erosion in some places (water courses and stream banks). This method is not recommended for resprouting species, such as wild ginger, as any remaining fragments of the root systems will regrow.



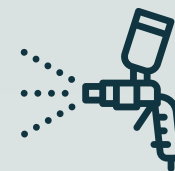
Ring Barking

The ring barking method is suitable for small to large pest trees that provide canopy. Leaving a canopy intact reduces the chance of other pest plants reestablishing in the area. It can take years for the selected pest tree to gradually break down, creating habitat for a range of birds, lizards and insects. To start, cut two horizontal rings 15cm or more apart. The cuts should be just deeper than the bark on the tree. Cut a line from the top ring to the bottom ring and work your way around removing all of the bark between the two rings, leaving an exposed cambium layer. Once all of the bark is removed exposing a section of the tree, apply a thin film of herbicide to the exposed section.



Vial Treatment

This method can be used to selectively control rhizomatous or layering creepers, such as jasmine, madeira vine and ivy. Cut vines low down close to the base where it goes into the ground. Place the end of the vine in the bottom of a bottle or vial containing concentrated herbicide. The herbicide will be taken up into the vine and spread through to other parts of the plant. Repeat this technique every 5 to 10 metres along the length of the vine. Monthly follow up may be required.



Foliar Spray

This is a common pest plant control method for ecocontractors or volunteers with a Growsafe qualification. Herbicide can be applied over the entire surface of plant foliage. This method is very effective for a variety of applications, including instances of dense ground cover such as periwinkle, climbing asparagus and japanese honeysuckle, as well as large pest grass species, such as pampas. Before spraying, please consider variables such as weather conditions. Spraying should not proceed in the wind or rain as this may have unintended effects on non-target organisms on site. It is also important to select the appropriate herbicide for the sites, e.g. selective or nonselective, and to assess and check herbicide rates for the target plant type.



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For further information and resources:

Restore Hibiscus and Bays is committed to providing up-to-date best practice information, tools and equipment to groups and projects working within our network. We encourage individuals undertaking pest plant control to make their own appropriate decisions in line with this guidance, for example regarding personal health and safety or operating under certain environmental conditions. Please refer to the following documents and email us at info@restorehb.org.nz with any questions:

[Policy on Herbicide Use](#)

[Health and Safety Guidance](#)

[Forest and Bird Weed Control Guide](#)

[Other Pest Plant Resources](#)

[To borrow tools and equipment from Restore Hibiscus & Bays, visit out tool library](#)

www.restorehb.org.nz

