

# Removing Weeds

## Safety first!

Always wear protective clothing: long pants and sleeves, boots, plastic coated gloves, mask and eye protection – especially when handling toxic weeds or using chemicals.

## Selecting Weed Treatment Methods

A range of effective control methods are outlined. The method(s) you choose will depend upon the nature of the infestation and where it is found. Issues to consider when selecting a method include:

- degree of infestation
- native plants and animals present and how they need to be protected
- ability of weeds to resprout from snapped tap roots
- presence of soil erosion
- likelihood of prolific regeneration of weeds from seed

Methods include physical, mechanical, biological, cultural and chemical. Choose a method or combination of methods that suits your conditions. Integrated Weed Management is a strategy that effectively and efficiently combines a number of control methods and often yields better results while minimising potential off-target impacts on surrounding vegetation (crop, pasture, native vegetation), waterways or operator.

Rapid and unplanned removal of large quantities of weeds can lead to bigger problems. The exposed soil may become vulnerable to erosion and invasion by other weeds as well as hasten the germination of existing weed seedbanks. Consider your rehabilitation/revegetation needs if managing environmental weeds or plan for the resowing of pasture or crop species in farm paddock situations. In bushland areas stagger your weed removal over a period of time - remember that in areas with dense and widespread weed infestations, native animals (eg. penguins, wrens, bandicoots, reptiles and invertebrates) may be nesting.

## Prevention/Cultural Control

Includes approaches such as farm and bush hygiene, crop rotation, cultivation and over-planting. Be mindful of the role of vehicles and humans in the spread of weeds in farmland and bushland areas. In some farm situations cultivation and resowing with a pasture or crop may be beneficial. Ensure vigorous growth to out compete weed seedlings. Over-planting or shading out weeds can be used in bushland revegetation programs where establishing a canopy of local native shrubs or trees can help control herbaceous weeds. This is a long-term strategy that is normally combined with other weed control methods.

## Mechanical/Physical Removal

This is almost never a solution in itself, but mechanical removal can reduce the mass of weeds you need to treat, reduce further seeding if done at flowering and may provide easier access to the area for future treatment. Consider chainsaws, brushcutters, tractor slashers and mowers but be sure to minimise soil disturbance and wash down machinery after treatment of an area and prior to leaving the site. Always consider native plants and animal habitat, and seek advice first.

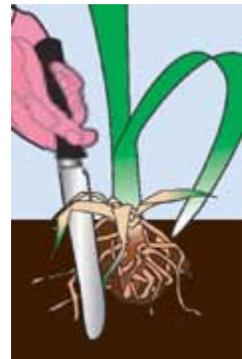
### Hand-pull

- Hand-pulling is a relatively gentle control method for seedlings, herbs and grasses.
- Hand-pulling is best carried out when the soil is damp, when the root systems are more easily dislodged and less damage is done to the soil structure.
- A number of weeds can be easily hand-weeded from the bush, particularly young plants that have not developed an extensive root system.
- This method of control can be very effective when dealing with small populations of environmental weeds, including boneseed, broom, sweet pittosporum, and many other woody and grassy weeds.



### Dig-out

- Dig out plants with tougher root systems:
- Insert a long knife or narrow trowel into the soil outside the root system.
- Gently loosen the soil, work around the roots and then work the plant out gently.
- Plants without seed that will not re-sprout can be left to rot.
- Otherwise, bag all weeds, cover your load and take to the tip.



## Biological Control

Sometimes insect predators and pathogens from the country where the weed originated can be introduced to reduce the vigor of the weed infestation. Find out if any biological control agents are present or may be available for release in your area before you use chemicals.

## Chemical Control

Get professional advice and follow herbicide instructions carefully. Note that by law, herbicide control may only be undertaken using chemicals registered for specific weeds and situations. **If spraying near waterways, check that the appropriate chemical is used.**

### Cut & Paint

- The cut and paint method is the best technique for large or woody weeds.
- Cut **all** stems as close to the ground as possible. A horizontal cut prevents runoff of poison.
- Apply herbicide to the cut stems within 20-30 seconds.
- For creepers, climbers and some other woody plants it is possible to scrape the woody stem and paint with herbicide.



### Drill & Fill - Frilling or Frill & Fill

- Drilling and filling involves drilling holes around the trunk of a tree, usually at about 150 mm spacing's, and filling the holes with a quantity of herbicide.
- Frilling is similar but is done with a chisel and hammer and the spacing is much closer. The chisel is held at a slight angle to the trunk, hit with a hammer and the herbicide applied. The aim is not to drill or chisel too deeply but to target the layer just under the bark that transports the chemical throughout the plant (cambium layer). It is important not to ringbark the tree when frilling as this will reduce the dispersal of the herbicide.
- When carrying out drill and fill or frill and fill be particularly careful as the herbicides used are more concentrated than those used for spraying.