



## Basic Weed Control Techniques

Different types of weeds require different techniques to be removed. This fact sheet outlines the methods you'll need to remove the four main weed types

1. smaller weeds
2. vines and scramblers
3. woody weeds
4. weeds with underground reproductive systems.

### 1. Smaller weeds (e.g less than one metre tall)

For example small soft weeds (fleabane, crofton weed, small grasses) and seedlings of weeds (privet, lantana, moth vine, serrated tussock, African lovegrass)

#### How to remove weeds less than one metre tall

**A. By hand (for ease and best results do this when the soil is moist. Wearing gloves is also highly recommended)**

**Step 1** - Gently remove any seeds or fruits and carefully place into a bag.

**Step 2** - Grasp stem at ground level.

**Step 3** - Rock plant backwards and forwards to loosen roots, and pull out gently.

**Step 4** - Carefully tap the roots to dislodge any soil, replace and pat down.

**Step 5** - Leave weeds so roots don't make contact with soil e.g. on a rock or hung in a tree.

N.B. To avoid fatigue when using hand removal, vary your body position.

#### B. Foliar spray

There are three types of spraying; spot spraying, broad area spraying and splatter gun application. Spot spraying is recommended for targeting weeds where natives are present. Broad area spraying is used when there are no native plants present. Splatter guns are useful for dense infestations of particular weeds (e.g lantana) and can be targeted to avoid natives.

**Step 1** - Check weather conditions to ensure no rain is forecast and little wind.

**Step 2** - Identify native plants in the target area and clear weeds around them using methods other than foliar spray that don't damage the native plants.

**Step 3** - Prepare herbicide and equipment in accordance with manufacturer's instructions.

**Step 4** - Using the appropriate method, spray the target area taking care to avoid spray 'drift' to avoid natives. Note: protective clothing and equipment should be worn -including long pants, sleeves, and gloves, eye protection etc.

Note: Serrated tussock can also be removed by chipping with a mattock or by ploughing.



*Hand-pulling small weeds*

## 2. Vines and scramblers

For example balloon vine, morning glory, honeysuckle, cape ivy, jasmine, madeira vine.

### How to remove vines and scramblers

#### A. By hand

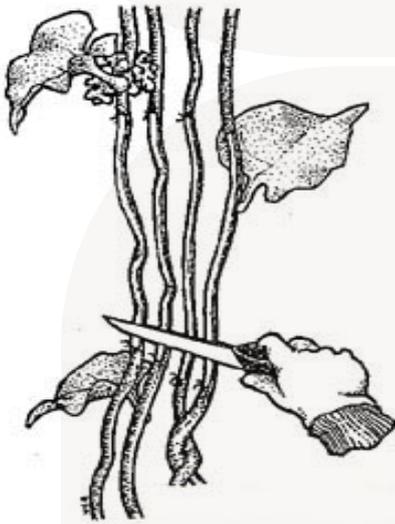
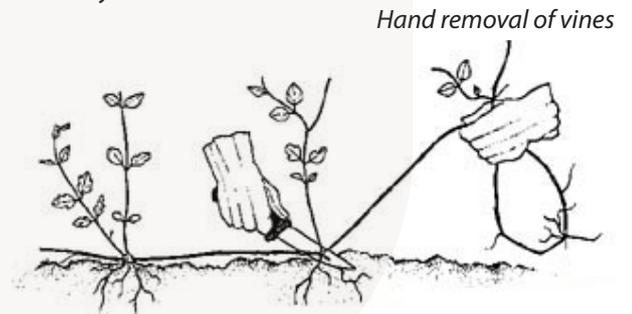
**Step 1** - Take hold of one strand and gently pull it along the ground towards you.

**Step 2** - Check points of resistance where fibrous roots grow from the nodes. Cut roots with a knife or dig out with a trowel and continue to follow the strand.

**Step 3** - Manually remove the major root systems or scrape/cut and paint with herbicide.

**Step 4** - Bag any reproductive parts.

N.B. To avoid fatigue when using hand removal, vary your body position. Wearing gloves is highly recommended.



#### B. Stem scraping

**Step 1** - With a knife, scrape 15 to 30 cm off the stem to reach the layer below the bark/outer layer. No more than half the stem diameter should be scraped. Do not ring bark. Larger stems (> one cm) should have two scrapes opposite each other.

**Step 2** - Immediately apply herbicide along the length of the scrape. Vines can be left hanging in trees after treatment.

**Step 3** - (For madeira vine only) Aerial tubers on madeira vine should die with the plant when stem scraping is used. Those that fall from the plant in the scraping process should be bagged

#### C. Skirting (e.g for balloon vine)

**Step 1** - With a pair of secateurs or loppers cut stems of vines leading into the tree canopy at approximately waist height. This will kill the top of the vine and allow light to reach the plant being smothered.

**Step 2** - Cut and immediately paint stems still attached to the soil with herbicide.

#### D. Foliar spray

There are three broad types of spraying; spot spraying, broad area spraying and splatter gun application. Spot spraying involves targeting weeds where natives are present. Broad area spraying is used when there are no native plants present. Splatter guns are useful for dense infestations of particular weeds and can be targeted to avoid natives.

**Step 1** - Check weather conditions to ensure no rain is forecast and little wind.

**Step 2** - Identify native plants in the target area and clear weeds around them (half to one metre).

**Step 3** - Prepare herbicide and equipment in accordance with manufacturer's instructions.

**Step 4** - Using the appropriate method, spray the target area taking care of spray 'drift' so as not to spray natives. Protective clothing and equipment should be worn - including long pants, sleeves, and gloves, eye protection etc.

### 3. Woody Weeds

Examples - willow, false bamboo, honey locust, hawthorn, gorse, wild tobacco, African boxthorn, African olive, lantana, blackberry, bitou bush, cotoneaster, privet, camphor laurel, mickey mouse plant (ochna) and cassia/senna.

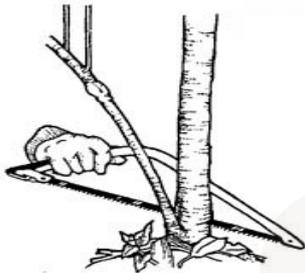
#### How to remove woody weeds

##### A. Cut and Paint (Useful for small to medium sized woody weeds up to 10cm basal diameter)

**Step 1** - Make a horizontal cut as close to the ground as possible with secateurs, loppers, brushcutter, chainsaw or a bush saw. Cuts should be horizontal to prevent herbicide from running off the stump. Please note that sharp angle cuts are hazardous.

**Step 2** - Immediately apply herbicide to the exposed flat stump surface before the plant cells close and translocation of herbicide ceases.

**Step 3** - If plants resprout, cut and paint the shoots after sufficient regrowth has occurred.



*Cutting and painting*



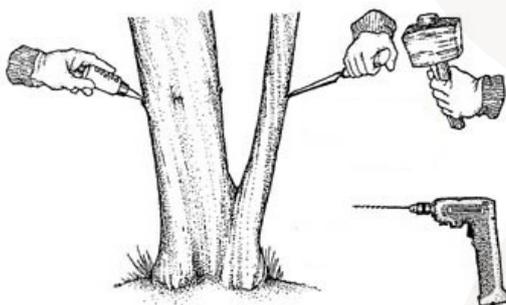
##### B. Drilling

**Step 1** - At the base of the tree drill holes at a 45 degree angle into the sapwood at 5 cm intervals. For multistemmed plants, inject below the lowest branch or treat each stem individually. Please note that plants should be healthy and actively growing.

**Step 2** - Immediately fill each hole or cut with herbicide before the plant cells close (within 30 seconds) and translocation of herbicide ceases.

**Step 3** - Repeat the process at 5 cm intervals around the tree.

N.B. Deciduous plants are best treated from late Spring to early Autumn when the plant is growing the most.



*Drilling and frilling*

##### C. Frilling or Chipping

**Step 1** - Make a cut into the sapwood with a chisel or axe. For multistemmed plants, chip below the lowest branch or treat each stem individually. Please note that plants should be healthy and actively growing.

**Step 2** - Immediately fill each hole or cut with herbicide before the plant cells close (within 30 seconds) and translocation of herbicide ceases.

**Step 3** - Repeat the process at 5 cm intervals around the tree.

N.B. Deciduous plants are best treated from late Spring to early Autumn when the plant is growing the most.

##### D. Foliar Spray (only where weed is less than one metre tall)

There are three broad types of spraying; spot spraying, broad area spraying and splatter gun application. Spot spraying involves targeting weeds where natives are present. Broad area spraying is used when there are no native plants present. Splatter guns are useful for dense infestations of particular weeds and can be targeted to avoid natives.

**Step 1** - Check weather conditions to ensure no rain is forecast and little wind.

**Step 2** - Identify native plants in the target area and clear weeds around them (half to one metre)

**Step 3** - Prepare herbicide and equipment in accordance with manufacturer's instructions.

**Step 4** - Using the appropriate method, spray the target area taking care of spray 'drift' so as not to spray natives. Note: protective clothing and equipment should be worn - including long pants, sleeves, and gloves, eye protection etc.

## 4. Weeds with underground reproductive structures

Examples: Taproots (cats ear, dandelion), rhizomes (asparagus fern, ginger plant), bulbs and corms (oxalis, onion weed, watsonia, freesias, montbretia), tubers (madeira vine, turkey rhubarb).

### How to remove weeds with underground reproductive structure

#### A. Hand removal of plants with a taproot

**Step 1** - Gently remove and bag seeds or fruit.

**Step 2** - Push a narrow trowel or knife into the ground next to the taproot. Carefully loosen soil. Repeat this step around the taproot.

**Step 3** - Grasp stem at ground level, rock plant backwards and forwards and pull gently.

**Step 4** - Gently tap the roots to dislodge soil. Replace disturbed soil and lightly pat down.

N.B. To avoid fatigue when using hand removal, vary your body position. Wearing gloves is also highly recommended.

Removing taproots



#### B. Crowning and crown injection (for asparagus fern)

Asparagus fern with large crowns can be poisoned by cutting or drilling the crown and applying appropriate herbicide. Otherwise for smaller crowns:

**Step 1** - Gently remove and bag stems with seed or fruit.

**Step 2** - Grasp the leaves or stems together so that the base of the plant is visible.

**Step 3** - Insert, at an angle, a knife or lever, close to the "crown" (woody section at base of the plant).

**Step 4** - Cut through all the roots around the crown (Note: roots and tubers can be left in situ).

**Step 5** - Remove and bag the crown.



Crowning

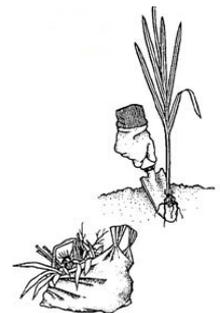
#### C. Removal of plants with Bulbs, Corms or Tubers (for onion weed, watsonia, arrowhead vine, montbretia)

**Step 1** - Move leaf litter away from base of plant.

**Step 2** - Dig down next to the stem until the bulb or tuber is reached. Further digging may be required for plants with more than one tuber (e.g. arrowhead vine).

**Step 3** - Remove plant and carefully bag the bulb or tuber.

**Step 4** - Some bulbs (e.g. oxalis, onion weed) may have small bulbs attached or present in the soil around it. These need to be removed.

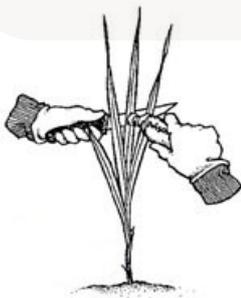


Removing plants with bulbs, corms and frilling

#### D. Herbicide Treatment - stem swiping

**Step 1** - Gently remove any seed or fruit and carefully place into a bag.

**Step 2** - Swipe the stems and leaves with a herbicide applicator.



Stem swiping

## Important message about selecting and using herbicides

### Selecting the most appropriate herbicide

- Ensure the weed is accurately identified
- Seek advice on the most appropriate herbicide and method of application for your needs (e.g NSW Department of Primary Industries ([weeds.dpi.nsw.gov.au](http://weeds.dpi.nsw.gov.au)) or your local council weed officers)
- Know the types of natives present and their proximity to weeds
- Know how to pest to apply the herbicide (e.g spraying, cut stump, stem injection)
- Be careful when selecting and using herbicides near streams so as not to contaminate the water. There are only a few herbicides registered for use near water.
- Most herbicides work best when plans are actively growing and not stressed from drought or frosts.

### How to safely use herbicides

- Read the label before opening the container
- Follow the instructions on the label
- Wear protective clothing as per the label
- Wash you hands after use and before eating or smoking.