

WEED REMOVAL TECHNIQUES

HANDWEEDING is a common method of weed removal. It is essentially pulling out weeds, roots and all, by hand. Gloves and long sleeved shirts should be worn to guard against sharp debris in the soil or allergic reactions to the weed material.



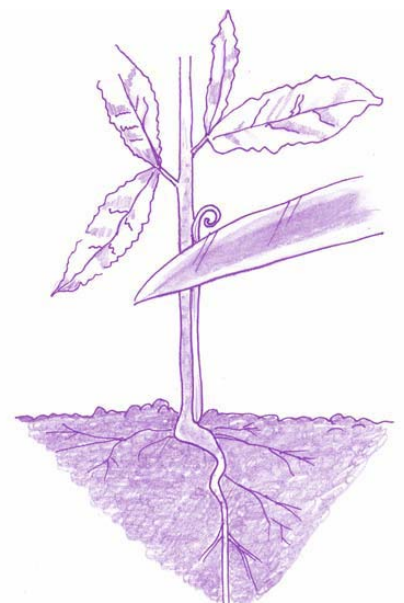
Shake the weed of soil once you have pulled it out so as to reduce heavy weed loads and to prevent unnecessary loss of soil in the area you are weeding. A boning knife can also help to loosen the soil while hand weeding.

SEED HEAD REMOVAL ensures that the plant will not be able to reproduce. All seeds should be bagged and disposed of. Care should be taken not to spread seed, whilst attempting removal. When you are using secateurs it is also important to cut away from yourself and to wear gloves to reduce injury.

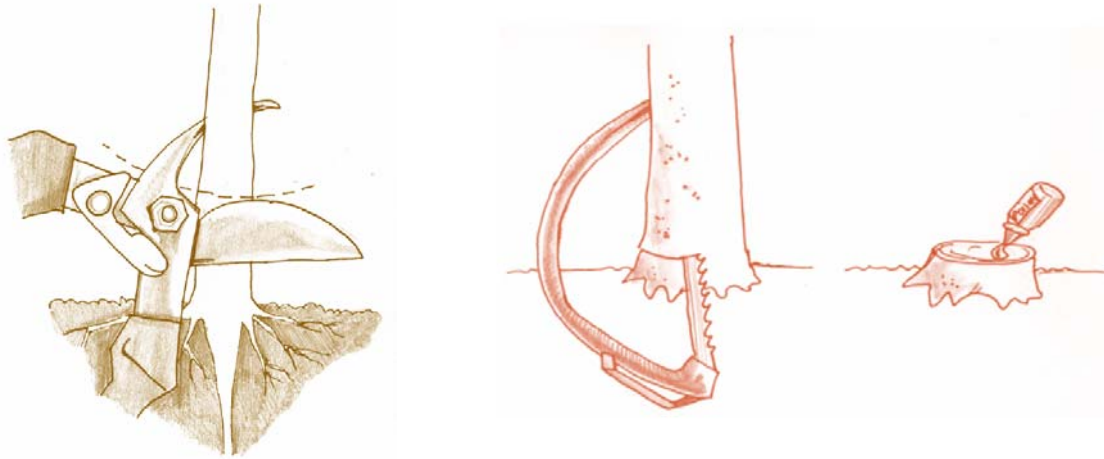


SCRAPE & PAINT technique is commonly used on vines or hardy weed shrubs (such as Ochna, Blackberry or Sida). Use a moderately sharp knife and lightly scrape from the stem base up to either the first branch or 10-15 cm up the main stem.

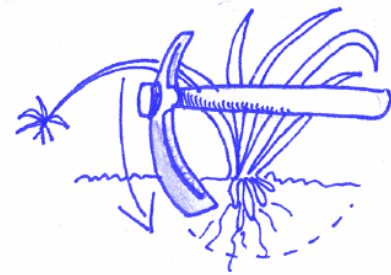
Start the scrape as close to the root base as possible. Immediately after scraping apply neat glyphosate onto the scraped surface, either using a brush or applicator bottle. This allows more herbicide to enter the plant than if you used the cut and paint method. If a stem is thicker than 3cm scrape and paint both sides of it. When you are using herbicide wear PVC coated gloves to protect against contamination, and while scraping to protect against knife injury.



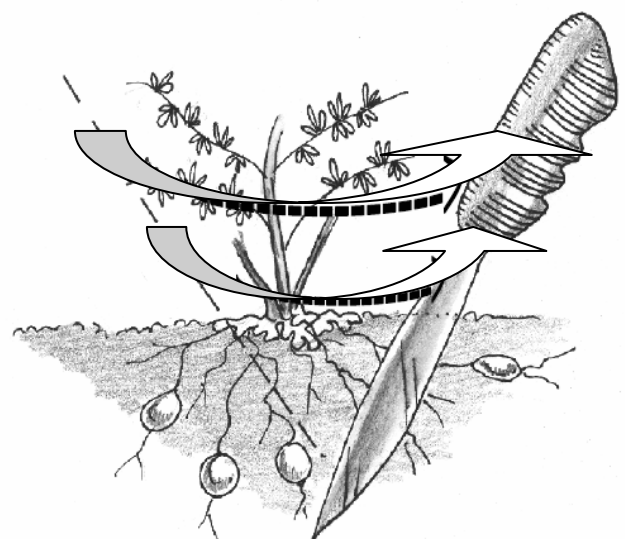
CUT & PAINT is a technique used to remove woody weeds. Cut as low and as flat to the ground as possible with a secateurs or saw (depending on the size of the plant trunk). Make sure that the cut is flat (horizontal) so that when herbicide is applied it will not run off. A cut at a sharp angle could also be a trip hazard/ sharp point to stab or trip yourself on. Apply the herbicide evenly either using a brush/applicator bottle.



MATTOCKING out weeds with thick or tuberous roots can also be used as an alternative to herbicide. This is an effective way of removing Chlorophytum, Asparagus fern, thick grasses, Ginger Lily and other similar weeds. Gloves should be worn, as well as safety glasses, due to flying dirt that could get in your eyes. Be aware that varieties of spiders tend to hide in root bases so gloves should be worn. Care should also be taken while swinging a mattock when there are others nearby. A short handled mattock is best.



CROWNING is another way that weeds with tough root systems or rhizomes can be removed. Using a moderately sharp knife and with a circular motion cut into the soil and roots around the root base. Care should be taken while using a sharp knife so wear gloves. Do not leave your knife 'lying around' when it is not being used but place it back into your pouch. Also remember your knife is not a lever. A levered knife will usually break.

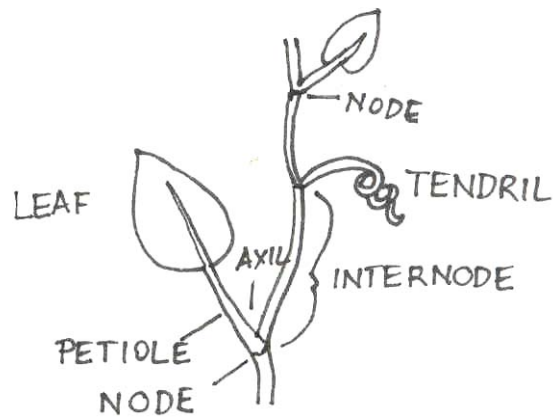


CORRECT HERBICIDE USE

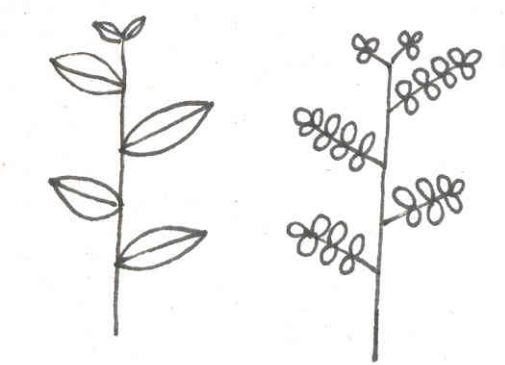
Always use herbicides such as glyphosate according to product label directions. Be familiar with the Material Safety Data Sheet and correct usage for the product

GLOSSARY

BASIC LEAF STRUCTURE:



Alternate leaves: (showing simple and compound leaf structures)

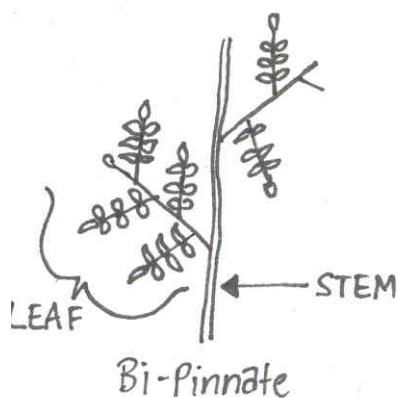


Annual: A plant that grows from seed, matures and sets seed then dies in one year.

Berry: fruit that has one or more seeds surrounded by soft flesh

Biannual: A plant that grows from seed, matures and sets seed then dies in less than 2 years.

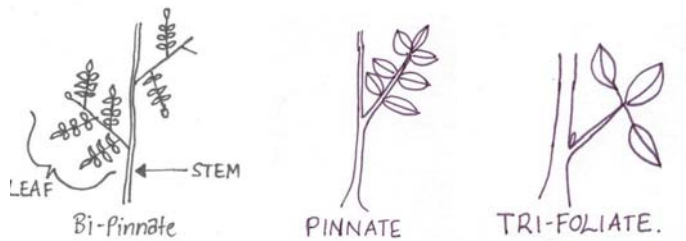
Bipinnate:



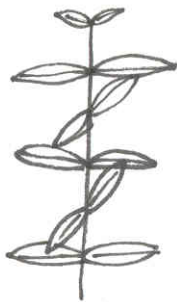
Capsule: papery structure that holds seed

Coloniser: The first plant to emerge as a seedling in disturbed areas (i.e. in landslides, where a tree has fallen over or human land clearing that has increased the amount of sunlight reaching the ground surface)

Compound leaves: A 'leaf' comprising of several 'leaflets'



Decussate:



Discolourous: being of one colour on the top surface and another colour on the under surface.

Eradicate: to remove and destroy.

Fronde: leaf structure of a fern

Lenticels: small breathing holes up the stems of some plants

Monoculture: a plantation, or large area of plants that has only one species growing in it

Nodes: A portion of a stem where a leaf, root or bract (leaf like structure) arises.

Odorous: having a smell

Opposite leaves:

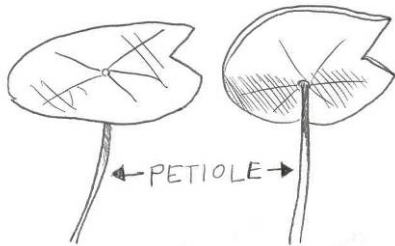


Palmate: leaves that are arranged like a palm



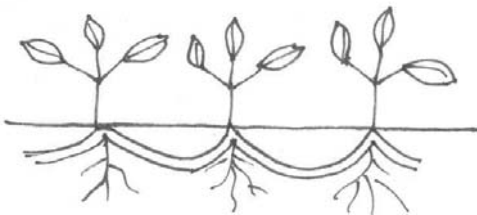
Perennial: A plant that persists for 3 or more years.

Petiole: a small stem or stalk that connects the leaf to the main plant stem/trunk

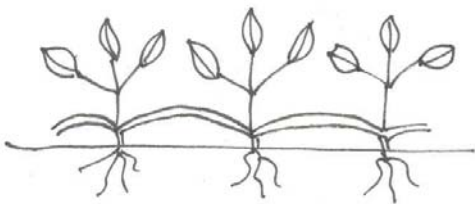


Pod: a seed capsule that is long and dries out to reveal a row of seed inside

Rhizome: an underground stem



Runner: a slender prostrate stem, having a bud at the end, which sends out, leaves and roots also referred to as a stolon.



Sclerophyll: plants that are adapted to drier areas, these types of plants generally have features such as oil glands, thick leaves, reduced leaves and more to prevent water loss.

Sheath: a long tubular structure either entire or split down one side of a leaf blade



Skirting: A bush regeneration term describing the action of cutting away vines growing over trees/shrubs. Skirting kills the top of the vine and allows light in to the plant that was being smothered.

Stolon: a lateral stem growing above ground and which roots at its nodes, commonly known as a runner.

Surfactant: a spreading or wetting agent that is added to herbicide to maximise herbicide contact to leaves.

Terminal: at the end, at the tip of.

Tuber: an underground swollen stem containing food reserves.

Trifoliate: having 3 leaflets

Tri-veined: having three approximately longitudinal main veins

Understorey: a plant in a forest/woodland system that is below the canopy. This can be a shrub, grass, sedge or small tree.

Vegetative reproduction: being able to grow from a portion/small part of the plant without seed.

HORNSBY ONLINE HERBARIUM

The Hornsby Online herbarium is a fantastic resource for anyone wanting to identify plants in the Hornsby Shire, or Sydney region.

The online herbarium catalogues hundreds of native plants (and many weeds) found in Hornsby Shire, and is a database allowing users to search images and information for plant identification purposes.

The features of the Online Herbarium are:-

- Easy to use thumbnail images for quick searches
- Large downloadable scans of live plant material
- Information on each plant useful for identification
- Search tools that allow you to search by:-
 - where the plant was collected i.e. a specific reserve
 - what type of plant it is i.e. a shrub, grass, tree, weed e
 - using specific descriptions i.e. flower colour
 - advanced search tools

For the more advanced user, you can also search using the botanical search through classifications, plant families, genus type or species type.

It is highly recommended for volunteers/bush regenerators to use as a valuable resource, to learn plants in individual Bushcare sites, you could even download images of species in you site as you find them, print them up and make a site specific reference book! Go onto the Herbarium website now, and test it for yourself!

The Hornsby Online Herbarium is accessed through www.hornsby.nsw.gov.au then LIBRARY, then ONLINE RESOURCES (see below)

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NATIVE & WEEDS

Native and Weed Look-a-Likes

The "Look-a-likes" booklet illustrates information on weeds for further information on native plants and weeds that look like them. The booklet illustrates information on native and weed "Look-a-likes" in Hornsby Shire, herbicide, a glossary of terms and useful references

Click on the **Intro** to find out more about how to use the booklet.

If you are unsure of a plant such as a grass, look in the documents under the **type** of plant, e, shrub, or tree.

INTRODUCTION

GRASSES, GROUNDCOVERS AND SEDGES

VINES, SHRUBS AND TREES

WEED REMOVAL TECHNIQUES AND HERBICIDE INFORMATION

GLOSSARY AND REFERENCES

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REFERENCES & ACKNOWLEDGEMENTS

- B.A Auld and R.W Medd, (1987) *Weeds*, Inkata Press,
- Beadle, N.C.W (1976), *Flora of the Sydney Region* Reed Press,
- Benson, Doug & Howell, Jocelyn (2000) *Sydney's Bushland, More Than Meets the Eye* Royal Botanic Gardens Sydney,
- Buchanan, Robin (1981) *Common Weeds of the Sydney Region*, Inkata Press
- Buchanan, Robin (1990) *Bush Regeneration TAFE Notes*, Ryde TAFE NSW,
- G.Bryant, T.Rodd, B.Segall, R.Turner & E.Wasson (1997), *Botanica*, Random House Press,
- S. Emert (2001) *Gardeners Companion to Weeds*, New Holland Press,
- Fairley and Moore, (1989) *Native Plants of the Sydney District* Kangaroo Press,
- Harden, G.J (1993), *Flora of NSW*, Royal Botanic Gardens
- Hornsby Council Bushcare Team, (2000-2003) *Hornsby Bushcare Newsletters*,
- Sainty, G.R & Jacobs, S.L, (1981) *Waterplants of NSW* Water Resources Commission of NSW,
- The National Trust NSW (1991) *Bush Regenerators Handbook*, Sydney
- www.weeds.org.au, *Weeds Australia Website*

ACKNOWLEDGEMENTS:

Special thanks to Lyndel Wilson for all her initiative and steering to make this field guide achievable Lutz Jerofke, for his assistance in final editing and Hornsby Council Bushland and Biodiversity staff

Many Photos were contributed by:

- Lyndel Wilson, Hornsby Council
- Paul Marynissen, Noxious Weeds Officer, Hornsby Council
- Steven Pym, Noxious Weeds Officer, Hornsby Council
- Department of Agriculture, NSW
- Hornsby Online Herbarium collated by Ross Doig and Jenifer Lewis on the Hornsby Web Site www.bushcare.hornsby.nsw.gov.au

Other information sourced from

- Australian National Botanic Gardens Web Site www.anbg.gov.au

All plant specimens were collected in Hornsby Shire by Lyndel Wilson. All illustrations by Lyndel Wilson. Information prepared by Lyndel Wilson with the assistance of the Bushland and Biodiversity Team, Hornsby Council



Cardiospermum grandiflorum (Balloon Vine)

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Look-Alikes Booklet – 2nd Edition

Hornsby Council's Look-alikes booklet contains over 100 native and weed plants that look similar

The booklet contains full colour images, descriptions of the native and weed plants that look similar, and specific weed removal techniques.

The booklet also contains a glossary and common weed removal techniques.

