

Introduction

The most cost effective and successful weed control is achieved through an integrated control program, which uses a number of complimentary methods to achieve sustainable long-term weed control.

Before embarking on a weed control program you must have a long-term plan for the area, and be prepared to undertake follow-up weed control works and monitoring for a period of time.

Prevention is the First Step

The best way to manage weeds is to prevent them from establishing in the first place. There are a number of simple actions you should be undertaking to prevent weeds establishing on your property.

Stock and Overgrazing

- Never over-stock. Consider the land's sustainable carrying capacity when deciding on stock numbers.
- Avoid over-grazing. Bare ground encourages weed invasion. Pastures should not be grazed lower than ankle height. De-stock when necessary.
- Rotational / cell grazing will allow paddocks to rest and regenerate. Healthy paddocks are better able to resist weed invasion.
- Contain new stock in stockyards or a sacrificial paddock to allow any weed seeds time to be passed. Monitor these areas and control any outbreaks.
- Feed stock hay / other feed to reduce grazing pressure on paddocks.



The severely overgrazed paddock (right) will provide little competition to establishing weeds.

Machinery Hygiene

- Insist on a vendor declaration that machinery is weed free before entering your property.

- Designate strategic areas on your property to clean down machinery / vehicles.
- Work from weed-free areas into weedy areas to minimise weed spread on machinery.

Fodder

- Insist on vendor declaration when purchasing fodder.
- If unavailable, consider feeding stock in stockyards or a sacrificial paddock.

Rock and Fill

- Insist on a vendor declaration when purchasing landscape supplies and use reputable suppliers.

Soil disturbance

- Minimise soil disturbance caused by vehicle movement or unnecessary excavation.
- Always replace bare ground with desirable plants.

Pest animal control

- Controlling rabbits will remove the selective grazing pressure that favours weed establishment and spread.

Develop Your Weed Control Strategy

You need to carefully plan your weed control program and have a long-term goal. The following must be considered:

- Map weedy areas to help plan future works.
- Control isolated outbreaks of weeds immediately.
- Prioritise areas for weed control. Work from the least infested areas to the most infested areas.
- Work from edges of large infestation inwards to help minimise re-invasion into weed-free areas.
- Only undertake manageable amounts of work. Do not over commit your resources.
- Treat weeds before they flower and set seed.
- Seek assistance and further information when needed.

Weed Control Techniques

There are many different weed control techniques that can be used to tackle your weed problems.

Hand pulling / Chipping

Hand Pulling / Chipping can be done at any time of the year; however it is easiest when the soil is soft, just after rain. Care needs to be taken to remove the whole plant as some plants can regenerate from left behind root fragments. Minimise soil disturbance to avoid stimulating the weed seed bank.



Serrated Tussock being chipped out using a hoe.

Cultivation / Ploughing

Cultivation is an effective technique for some weeds and is usually undertaken as a preparation for pasture establishment.

Grooming / Brushcutting / Slashing

Slashing heavy weed infestations is used primarily as a short-term measure to stop seed-set and quickly reduce the above ground biomass. These techniques minimise soil disturbance and the amount of herbicide that would otherwise be required. These techniques are usually followed-up with spot-spraying of any regrowth.

Chemical Control

Used correctly, chemicals can provide very effective control of a range of weeds on your property. It is important to select the most appropriate herbicide for the target weed:

- **Selective herbicides** will target weeds with certain characteristics e.g. broadleaf herbicides won't damage grasses which is important in a pasture setting.
- **Non-selective herbicides** will control a wide variety of weeds.

Always follow the product label to achieve the best results. Labels will include information on the rate required for different weeds, the required personal protective equipment and any stock withholding periods. Care must be taken to avoid "spray drift" to off-target plants and onto neighbouring properties.

There are a variety of chemical application techniques and it is important to consider the target weed and desired outcome when selecting your technique.

Spot Spraying can be undertaken using a backpack or tank fitted to a vehicle. A wand is used to spray the herbicide directly onto the target plant. Spot spraying is suitable for small outbreaks of weeds, or when applying herbicide amongst desirable plants such as improved pastures and native vegetation.

Boom Spraying is usually applied to dense infestations or large areas of weed infestation that can be driven over with a tractor or vehicle. It is usually undertaken as a precursor to pasture renovation or crop establishment.



Spot spraying is a very effective weed control technique.

Cut and Paint is generally performed on trees and shrubs with small trunks and stems using secateurs, loppers or a chainsaw. Stems / trunks need to be cut as close as possible to ground level and immediately (within 15 seconds) painted with undiluted herbicide. Cutting as close to the base will prevent suckering.

Drill and Fill / Frill and Fill are generally performed on larger trees where habitat for fauna needs to be retained. Holes are drilled as close to the base of the trunk as possible: 2-3 cm deep on an angle and 5-10 cm apart which are then filled with undiluted herbicide. Frill and fill is the use of a tomahawk or axe to create wounds around the trunk which are also filled with herbicide.

Fire / Burning

Fire is used primarily as a technique to reduce the above ground weed biomass. It allows for follow-up control using other techniques such as herbicide spraying or cultivation and pasture establishment. Fire will be indiscriminate and desirable plants may be killed in the process.

Monitoring and Follow-up

To achieve successful long-term weed control, regular monitoring of treated areas must be undertaken. New outbreaks or regrowth must be controlled before they have a chance to reproduce and re-infest the site.

Monitoring and follow-up weed control may be needed for many years.

Further Information

Contact Council's Land Management and Biodiversity Team for further information and weed identification assistance on 9217 2147.