



Treat weeds

AHCPMG201A

By the end of this topic, you should be able to:

- Prepare to treat weeds
- Treat weeds
- Carry out post treatment operation

Impact of weeds

- Weeds affect a range of areas, including commercial crops, gardens, turf and natural areas.
- Some examples include:



Prickly acacia
Acacia pulchella

Affects natural areas



Nutgrass
Cyperus rotundus

Affects gardens and
turf



Barnyard grass
Echinochloa colona

Affects commercial
crops



Lantana
Lantana camara

Affects natural areas

Impact of weeds

- Weeds affect a range of areas, including commercial crops, gardens, turf and natural areas.
- Some examples include:



Onion weed

*Nothoscordum
inodorum*

Affects gardens



Milk thistle

Silybum marianum

Affects natural areas



Bindii

Soliva sessilis

Affects gardens and
turf



Common sowthistle

Sonchus oleraceus

Affects commercial
crops

- What should you do if you find weeds?
 - Visually identify the weed
 - Advise your supervisor of the sighting
 - Record details about the weed on a report form, identifying
 - Weed location
 - Area covered: L x W (m²)
 - Percentage covered
 - Potential threats the weeds pose to surrounding areas
 - Possibility of off-target damage
 - Discuss control methods with supervisor
 - Apply active listening when receiving instructions
 - Clarify any unclear instructions with your supervisor

- When preparing to treat weeds, you should undertake the following:
 - Be familiar with laws applicable to your workplace, such as:
 - Acts [e.g. *Work Health and Safety Act 2011* (Qld) which outlines employers' and employees' safety responsibilities, *Agricultural Chemicals Distribution Control Act 1966* (Qld) which outlines recordkeeping requirements]
 - Regulations [e.g. *Work Health and Safety Regulation 2011* (Qld) which addresses the handling of hazardous substances]
 - Codes of Practice [e.g. *Managing risks of hazardous chemicals in the workplace – Code of Practice 2013* which describes the types of labels that may be present on chemical treatments]
 - Check for underground services, especially if digging
 - Contact Dial Before You Dig

- There are a range of different treatment options, including:
 - **Cultural**
 - Involves manipulating farming practices to suppress weed growth and production, while promoting plant development
 - **Biological**
 - Makes use of the weed's naturally occurring enemies, such as insects and pathogens (e.g. fungi and bacteria)
 - **Chemical methods (i.e. herbicides)**
 - These have varying modes of action:
 - May speed up, stop or change the plant's normal growth patterns
 - May dry out the weed's leaves or stems
 - May cause the weed drop its leaves
 - Can be selective (affects particular weeds) or non-selective (affects all plants)
 - **Physical**
 - Includes hand weeding, slashing, burning, cutting, ripping

Treatment options

- When preparing, handling, using and disposing of chemicals, refer to the following documents:
 - Product labels for active constituent details and application information
 - Safety Data Sheets (SDS) for safe usage
- Be aware of signage/labels, such as:



Acute toxicity



Corrosive



Flammable



Danger to
human health



Warning

Treatment equipment

- A range of equipment can be used for applying weed treatments, including:
 - Backpack sprayers
 - Brushcutters
 - Chainsaws
 - Handsaws
 - Ladders
 - Mattock
 - Rippers
 - Spray tanks
 - Tractor drawn cultivation equipment
 - Weedicide applicators

Mattocks are particularly useful.

They can remove small herbaceous weeds as well as large clumping weeds!

Be sure to follow the operator's manual for instructions on safe start up, use and shut down of equipment

- Irrespective of the treatment option applied, you should always use Personal Protective Equipment (PPE), such as:
 - Gloves
 - Face shield
 - Goggles
 - Protective clothing
 - Work boots

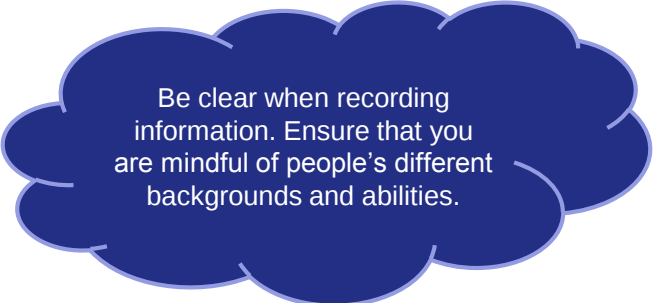
To provide the best protection possible, PPE should appropriately fit the individual and be maintained

Removing weeds

- Follow the steps outlined below to remove weeds:
 - Select appropriate equipment for chosen treatment method
 - Prepare and apply treatment methods
 - Follow WHS and environmental requirements
 - If using a backpack sprayer, undertake the following:
 - Fill tank with water, closing caps taps and lids
 - Pump the handle to pressurise the tank
 - Look for leaks
 - Check the spray stream, making adjustments as required to avoid spray drift

- Apart from eradicating weeds, treatments may have a range of other unwanted effects, including:
 - Chemical spillage
 - Surface run-off
 - Changes in soil structure
 - Soil contamination
 - Leaching and contamination of the water table
 - Reduction in habitat
 - Spray drift and damage to off-target organisms/produce
 - You should use guards or shields to protect plants that you do not want to be affected by spray treatments

- The law requires a number of records need to be kept when treating weeds, including:
 - Name of operator
 - Treatments applied
 - Date of application
 - Rate of application
 - Equipment settings
 - Weed numbers
 - Numbers of beneficial organisms
 - Accident and dangerous occurrence reports



Be clear when recording information. Ensure that you are mindful of people's different backgrounds and abilities.

Refer to the relevant legislation for your state.
For example, in Queensland refer to the *Agricultural Chemicals Distribution Control Act 1966* (Qld)

- As part of clean-up processes, you should:
 - Shut down, maintain, clean and store tools and equipment according to manufacturer's specifications
 - Report identified hazards and faults within a timely fashion
 - Store chemicals
 - Ensure chemicals and fuels are not stored together, as this may cause explosions
 - Ensure the storage area is well-ventilated to avoid the build up of fumes and gases
 - Lock up the storage area to avoid access by unauthorised persons
 - Dispose of materials that cannot be reused or recycled
 - Ensure you implement environmentally safe practices
 - Note: Green weeds that do not contain seeds can be left on site after treatment
 - Follow Safety Data Sheet (SDS) requirements