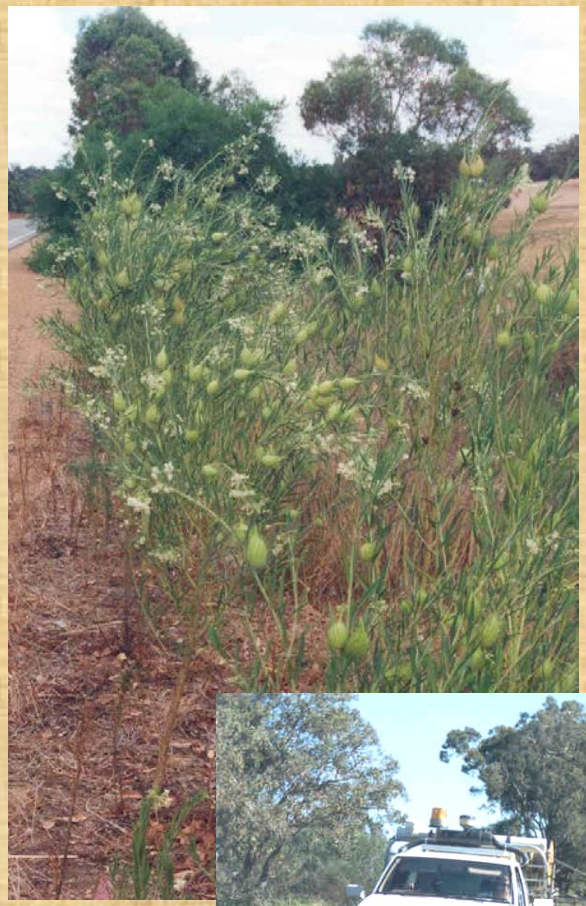
Guidelines for Weed Management



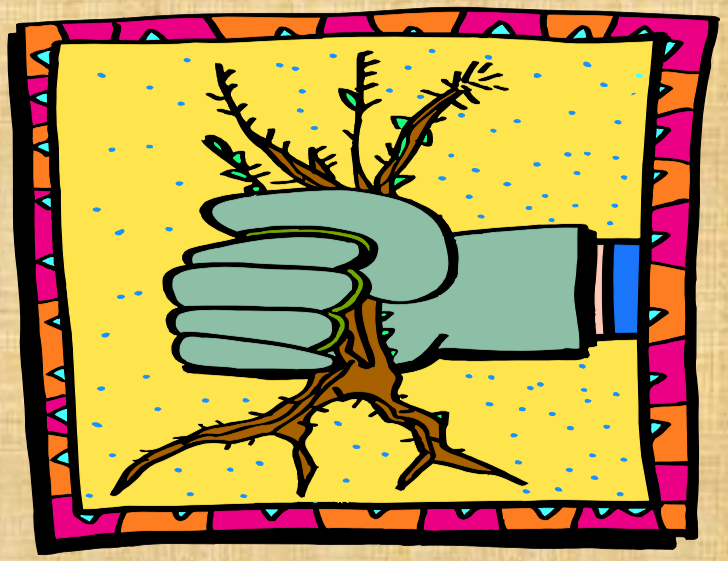
What is a weed ?

The National Weed Strategy

" a plant that has the potential to have a detrimental effect on economic social or conservation values ".

What makes a plant a weed

Most of the plants that become weeds here come come from countries with a similar climate as ours, e.g. Mediterranean counties or South Africa



Where do weeds come from?

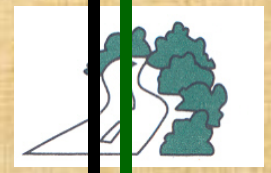
Many weeds have escaped from gardens.

Some plants were introduced for agricultural or dust control purposes e.g. Love grass & veldt grass, and have become weeds along roadsides and in bushland.

The cost of weeds

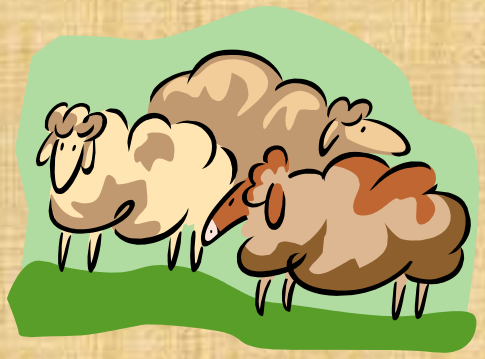
More than 10% of the 10,000 species of flowering plants in WA are introduced and have the potential to become weeds.

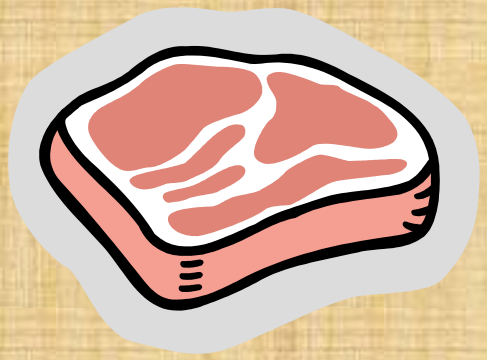
In 1995 Australia spent $452 million on herbicides for weed control.



The effects of weeds

In agriculture they reduce yield or contaminate crops, poison stock, reduce carrying capacity, downgrade wool quality, taint milk and meat



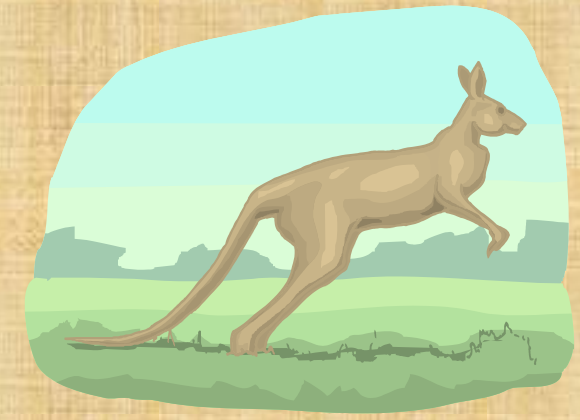


The effects of weeds

In waterways water weeds can reduce oxygen and cause algal blooms to prosper with negative effects to native aquatic fauna

The effects of weeds

Weeds in bush land areas inhibit regeneration, affect nutrient recycling, change fire characteristics, alter fauna resources, displace native fauna.



Don’t make a problem !

Windrow of love-grass spoil that provides ideal habitat for rabbits

Weed categories

Environmental weeds impact on natural ecosystems such as roadsides and bushland.

Agricultural weeds impact on production of food, wood, etc.Declared weeds are required under law to be controlled by the property owner.

Sleeper weeds are plants that are not yet considered weeds but are likely to become so.

Are there any sleepers in your

local area?

Report sightings of strange or unusual plan

Environmental Weeds

Environmental **weeds are a threat to our native flora and fauna:**

Compete for space and nutrients and smother our native plants

Dominate an area, reducing the number of native plant types and numbers, this in turn reduces the number and types of fauna the vegetation can support, so as weeds take over, many birds, animals and insects disappear as they lose their natural food source.

That is weeds decrease our biodiversity

Roadside Weeds

Weeds in the roadside and shoulders greatly increase the cost of road maintenance and the replacement of weeds with native vegetation can reduce these costs.

FIRE = Weeds = FIRE

FIRE

Disturbance of roadside

increase in weeds

increase in flammability

increase in culmulative fuel availability

increase in continuity of fuel bed

Fire and Weeds

Many weeds present a greater fire threat than native vegetation .

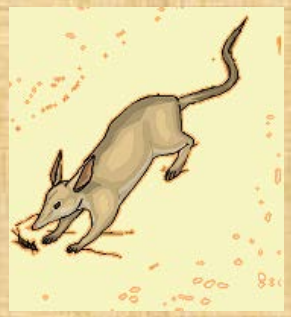
- **Many are annuals, they build up a huge biomass that dies off in summer leaving a highly flammable roadside,**
- **Some thrive after burning, presenting an even greater fire risk,**

  eg. Lovegrass

Something good about Weeds ?

They can help hold soil together and prevent wind and water erosion.

Lovegrass and Watsonia provide habitat for bandicoots, protecting them from foxes



Not

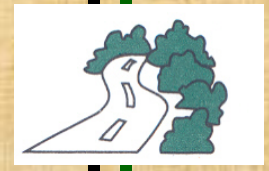
Weeds won't just go away, plan to control them

Develop a Weed Action Plan

1. Carry out site assessment.
2. Set Objectives based on available resources.
3. Develop and implement an action plan to achieve objectives.
4. Monitor performance and change action as required.

Benefits of Weed Control

- The economic benefits of weed control in the drains and shoulders are:
- Reduced need for grading
- Reduced loss of shoulder material
- Reduced need for drain cleaning and mowing
- Reduction in road failures due to water ponding and soft shoulders



Controlling Weeds

Is expensive

don’t let plants become weeds

dealing with a few plants is the easiest and cheapest way to manage weeds.

Practice hygiene

don’t spread weed seeds into areas that are **NOT** infested

work in clean areas first; clean down in infested areas.

Minimise disturbance

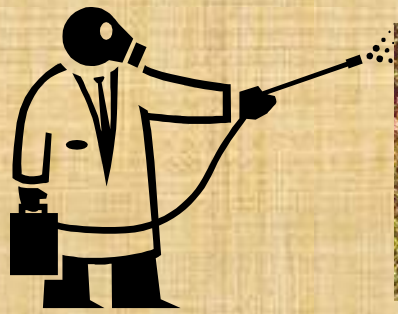
weeds easily invade areas disturbed by fire, machinery, etc. Replace weeds with local native vegetation

Chemical Vegetation Control

The use of chemicals to control unwanted vegetation is more critical than other methods and results will be unsatisfactory unless applied correctly.

The factors governing success are

- Type of herbicide used
- Weather conditions
- Application method
- The growth stage of the vegetation

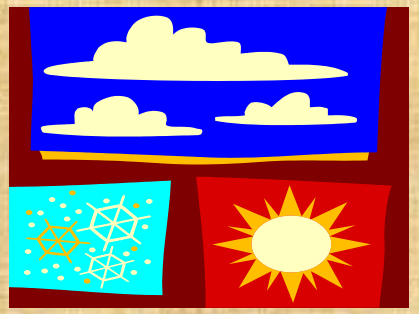


Type of Herbicide

It is important that the herbicide used is registered for the weed it is being used on and that it is used at the correct rate.

Care should be taken when using herbicides are used in water catchment area

Weather



Weather can have a major effect on the success or otherwise on herbicide spraying.

Rain can have a negative effect and render spraying ineffective as herbicides like glyphosate relies on dry foliage application.

Exessive heat will reduce the effectiveness of foliage applied herbicides.

Wind drift and direction will effect the correct placement of herbicides and can cause the spray drift to non target areas.

Method of Application

There are 3 main ways that herbicides are applied:

- In pellet form (e.g. soil steriliser along fence lines.
- Manual application (e.g. painted on to stumps), and
- delivery by spray nozzles (hand or multi boom)

The latter method is by far the most common way of application but to be effective a number of factors need to be considered.

Multi Nozzle Boom Spray

The benefits of this method of application are:

- **Accurate application**
- **Lower carrier rates**
- **Control of drift**
- **Lower cost**

Growth Stages of Vegetation

For optimum effect herbicides need to be applied at the correct growth stage of the vegetation being sprayed

Mechanical Control

- Mowing and slashing can be utilised

Biological Control

Biological Control is a method of weed control where natural organisms e.g. insects, fungi, are used to control weeds..

Contacting the RCC

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