



# Weeding Toolkit

Yarra Riverkeeper Association





## ***Introduction to Weeding***

To keep our Yarra River healthy and beautiful, care and engagement are important tools that each of us can draw on to contribute in our own small ways. This Toolkit can be a guide for channeling a desire to help into the proactive activity of weeding! Even this small action can help to improve the health of one of the Yarra River, one of Melbourne's greatest shared social, environmental and economic amenities.

Weeding can help grow our connection to our local Yarra River sites and increase our engagement with it and the environment. However, when weeding be sure to be mindful of your surroundings. If a weed is in a difficult to reach place, do not risk injury to yourself or the surrounding plants (and possibly wildlife) by trying to reach them. Always remember to take care and bring with you any personal protective equipment that will make your weeding work safer, more effective and more enjoyable such as gloves and a bag.

While weeding is a helpful and proactive way to involve ourselves in landscape maintenance, it can also cause harm to the ecosystem if we are not careful. Do not remove any plant that you are not 100% able to identify as a weed. Accidental removal of the wrong plants can end up causing more harm than good.



## What is a Weed?

A weed is any plant that has been introduced and has persisted in an ecosystem within which it did not previously exist. Weeds can be both exotic or native plants. The impact of weeds can be felt on many levels including the economy, environment or human health and amenity.

A plant may become a weed if it has some general traits that are advantageous to ease of spread and adaptability. These traits are: producing a high number of seeds and being able to tolerate a wide variation of environmental conditions. Weedy plant species are generally the first species to thrive in degraded landscapes and ecosystems for these two reasons.

Weeds are weeds because they do not fit in with the rest of their surroundings. When an invasive weed species is introduced to an ecosystem they can become wide spread due to a lack of natural regulators within the ecosystem allowing out of control spread and domination by the weed.

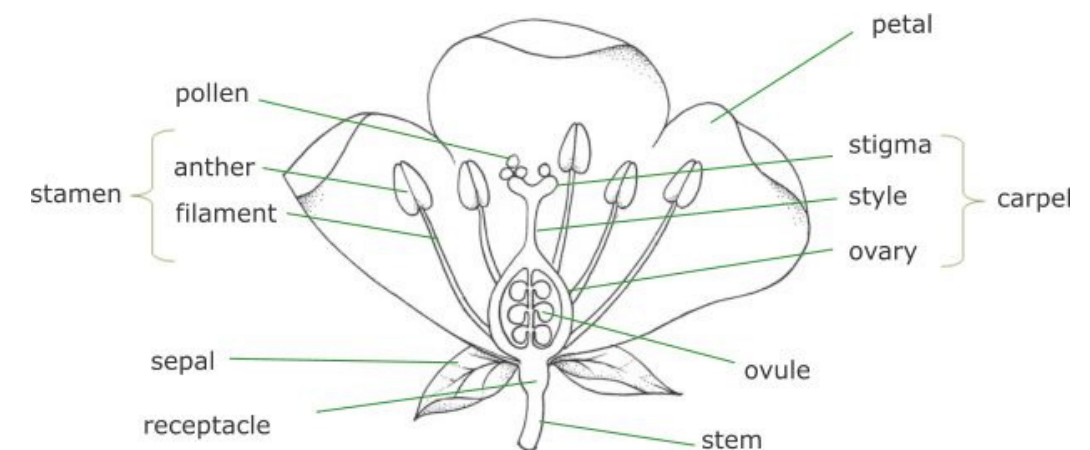
Most immediately this is due to competition for nutrients, water and sunlight. This outcompeting of native flora within an ecosystem can lead to habitat destruction. Habitat destruction in turn may cause reductions in shelter, food and nesting places for native fauna. In addition to this, some weeds may be toxic to the local native fauna causing illness and even death.

## Why go Weeding?

Degrading landscapes offer opportunities for weeds to flourish. This creates a situation wherein beneficial native species are outcompeted by weeds causing ecosystem imbalances and further degradation. Weed management therefore becomes an important part of restoration of a landscape.

Weeding is a physical form of weed management which allows us to have a great level of selective removal of detrimental weeds.

As a community it is possible for us to create a positive difference to our local ecosystems if we adopt a proactive approach to protecting and maintaining them. Weeding is an ongoing effort and contribution to maintaining health in the ecosystems surrounding, involving and supporting the Yarra River's health and public amenity.



Flower Diagram  
Science and Plants for Schools (SAPS)





# Gallery of Weeds

## Weeds

Page 8

Common Name	Scientific Name
Black Nightshade	Solanum nigrum L.
Twiggy Turnip	Brassica fruticulosa
Mallow	Malva parviflora L.
Spiny Sow-Thistle	Sonchus asper L.

Page 9

Hairy Fleabane	Erigeron bonariensis L.
Ribwort	Plantago lanceolata L.
Lambsquarters	Chenopodium album L.
Bermuda Grass	Cynodon dactylon





**Black Nightshade**  
Solanum nigrum L.

#### Distinguishing Features

- 1 A bushy, herbaceous plant growing up to 1.25m in height
- 2 Rough textured stems and occasionally slight hair on leaves
- 3 Small star-shaped white (and often tinged with purple) flowers in small clusters
- 4 Small fruiting berries which are green early on although develop into a deep purple-black



**Twiggy Turnip**  
Brassica fruticulosa

#### Distinguishing Features

- 1 Stem grows to around 50cm; is grey-green, smooth and upright
- 2 Flowers have four yellow petals
- 3 Seed pods are long, thin and constricted around the seeds giving them a lumpy appearance
- 4 Lower leaves are longer than leaves higher up the stem, all are stemmed and lobed



**Mallow**  
Malva parviflora L.

#### Distinguishing Features

- 1 Erect, sprawling or decumbent\* herb growing up to 50cm in height
- 2 Round leaves with crenate edges, roughly 8-10cm



**Spiny Sow-Thistle**  
Sonchus asper L.

#### Distinguishing Features

- 1 Grows between 20-150cm in height
- 2 Various lobed, bright green leaves
- 3 Often have white bloom
- 4 Produce yellow flowers which are similar to that of a dandelion



**Hairy Fleabane**  
Erigeron bonariensis L.

#### Distinguishing Features

- 1 Grows up to 75cm in height
- 2 Blue-green foliage; very narrow, undulated leaves
- 3 Flower heads have white ray florets and yellow disc florets\*



**Ribwort**  
Plantago lanceolata L.

#### Distinguishing Features

- 1 Rosette-forming perennial herb, growing between 10-40cm in height
- 2 Long, flat leaves with 3-5 strong, parallel veins
- 3 Flower stem is leafless and can be smooth or have fine hairs
- 4 Flowering head is an oval-shaped inflorescence\* of many flowers, each with an individual bract\*



**Lambsquarters**  
Chenopodium album L.

#### Distinguishing Features

- 1 Grows between 30-150cm in height
- 2 The leaves at the base are longer and toothed, while the leaves farther up the stem are lanceolate-rhomboid in shape
- 3 Sometimes with reddish or red spotted leaves



**Couch Grass**  
Cynodon dactylon

#### Distinguishing Features

- 1 Grass blades are 2-15cm long and are grey-green in colour
- 2 Erect stems reach up to 30cm in height
- 3 Seed heads are produced in a spiked-star formation at the top of the stems



## Appendix

### Photo gallery



**Black Nightshade**  
*Solanum nigrum* L.



**Twiggy Turnip**  
*Brassica fruticulosa*



**Mallow**  
*Malva parviflora* L.



**Spiny Sow-Thistle**  
*Sonchus asper* L.



**Hairy Fleabane**  
*Erigeron bonariensis* L.



**Ribwort**  
*Plantago lanceolata* L.



**Lambsquarters**  
*Chenopodium album* L.



**Couch Grass**  
*Cynodon dactylon*



# Appendix

## Common Terms

### Leaf Shapes

**Leaf axil:** The angle between the upper side of the leaf and the stem

**Lanceolate:** lance shaped leaf, tapers to a point at either end

**Toothed:** having rough or jagged crevasses along the leaf edge, like teeth

**Undulated:** a leaf with wavy edges

**Crenate:** a leaf having rounded bumps/being scalloped along the edges

**Seed pod:** The case inside which the seeds of a plant are stored

**Disturbed land:** land with reduced habitat value due to factors such as removal of vegetation or topsoil, or changing land use such as being an agricultural landscape

**Riparian:** on the bank of a river

**Anthropogenic:** originating from human activity

**Perennial Plant:** continual across seasons for at least two years

**Annual Plant:** a plant that completes its life cycle within one season

**Inflorescence:** the complete flowering head of a plant

**Bract:** a specialised leaf particularly pertaining to the fruiting body of a plant

**Erect (growth):** standing upright

**Sprawling (growth):** predominantly lateral growth

**Decumbent (growth):** grow predominantly on the ground but with an ascending extremity

**Degrading:** persistent declining structure, function and composition

**Herbaceous:** A vascular plant, lacking woody tissue

**Naturalised (plant):** a plant whose origin is elsewhere but has become established within the region

**Foliage:** the collective plural for a plants leaves

**Floret:** a small flower making up a composite flower head