

## Activity 1 - What's in a name?

**English** - Reading, Transactional writing  
**Science** - Making sense of the living world

List the English and scientific names for the different species. How are these names allocated? Compare this format with names for trees/flowers/animals. Find other plants with part of their scientific name the same.

## Activity 2 - Fact sheet

**English** - Transactional writing  
**Science** - Making sense of the living world

Write a fact sheet for a selection of pest plants (one plant per sheet). Ensure you include:

- common and scientific names
- photo or drawing
- recognisable features
- damage caused by plant.

## Activity 3 - Biological control

**English** - Transactional writing  
**Science** - Making sense of the living world

Some of these pest plants are now controlled by biological methods. Find out which ones and detail the biological control methods used.

## Activity 4 - Spread the word, not the plant

**The Arts** - Developing ideas in visual art. Communicating and interpreting meaning

Design a poster to increase people's awareness of the danger posed by a local pest plant.

## Activity 5 - Control requirements

**English** - Reading, Transactional writing  
**Science** - Making sense of the living world

Group the plants by their categories

- Eradication
- Containment
- Surveillance

## Activity 6 - Control - yes or no!

**English** - Listening and speaking  
**Social studies** - Place and environment

Prepare a short (max 3 min) speech on the pros and cons of control of pest plants. Try to highlight the issues of personal choice and environmental damage.

Prepare a debate on the topic 'Introduced plants are killing New Zealand' Divide the class into teams to debate this topic. Allow time for students to develop their argument within the group and decide on speaking order.

## Activity 7 - Word find

**English** - Skills-spelling

Make up a word find (15 x 15 letters) that incorporates the names and features of the pest plants.

## Activity 8 - Letter to the editor

**English** - Transactional writing  
**Science** - Making sense of the living world  
**Social studies** - Time, continuity, change

On your regular walk around your local area you have noticed a marked increase in pest plants. Write to the editor of your local paper informing the public of this and what they should be doing about it.

## Activity 9 - Do the public know

**English** - Listening and speaking  
**Mathematics** - Statistics

Prepare a series of questions you can pose to local community people (relations/neighbours etc) to check their knowledge about pest plants in their area. You might use photos for identification. Conduct your interviews. Present the information you gather in two different types of graphs.

## Activity 10 - Bebop

**The Arts** - Developing ideas in music. Communicating and interpreting meaning in music

Make up a rap about the damage to our environment by pest plants.

## Activity 11 - Press and display

**Science** - Making sense of the living world  
**The Arts** - Developing ideas in visual art

Collect leaf samples from as many pest plants as possible. Press and dry the leaves and arrange them in a display folder with details of the plant and the dangers the plant poses. Use the same process to make a display of pest plant flowers.

## Activity 12 - Play the game

**The Arts** - Communicating and interpreting meaning. Developing ideas in visual art

**English** - Expressive writing  
**Science** - Making sense of the living world

Design a board game based on pest plants to encourage the public to be aware of them and the dangers they pose to our environment. A dice type of game would be easiest. Think of reward and punishment squares relating to pest plants and place these on the board. Make sure you try the game yourself. Ensure you clearly explain any rules necessary to play the game.

Mini unit

# Pest Plants in Taranaki



Pest plants can destroy native vegetation and threaten economic production. This mini unit provides some activities that may lead students to develop a deeper knowledge and understanding about the problems posed to our environment through the introduction of foreign plant material.

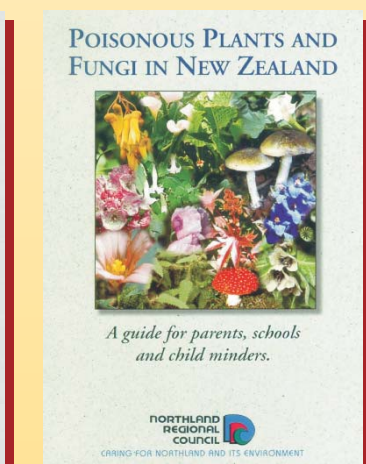
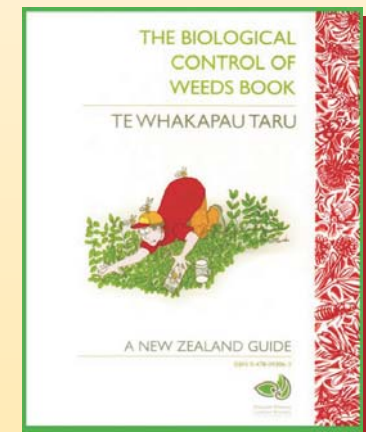
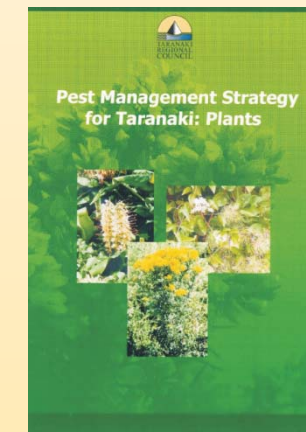
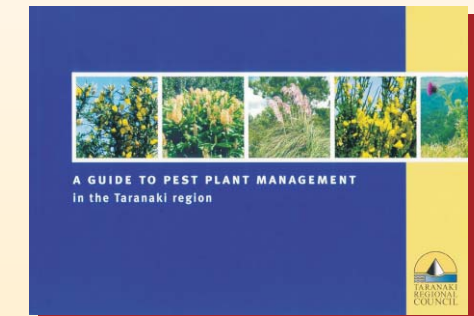
Teachers should help students choose activities that are suitable to their level and ability. Curriculum links are provided in italics under each activity to assist teachers with planning. Students should be encouraged to use a variety of sources to research information on these pest plants.

The Taranaki Regional Council is required under the Biosecurity Act 1993 to identify the weeds in the Taranaki region that the community believes warrant some action being taken. To achieve this requirement a document 'Pest Management Strategy for Taranaki: Plants' has been adopted. The purpose of the strategy is to improve the effectiveness of control of these weeds and sets out strategies and tactics to achieve this.

Pest plants are those weeds identified in the Strategy as having (or being capable of having) a regionally significant adverse environmental effect. These weeds were either introduced to Taranaki accidentally (such as giant buttercup seeds in hay or hay balers), or were imported as garden plants for their scent, colour and beauty (such as Chilean rhubarb or Wild ginger). They have since spread from people's gardens or properties, naturally or deliberately, and represent a serious problem or risk to agricultural production, human health and enjoyment, or natural ecosystems.

All the listed plants are barred from being sold, propagated or distributed. Please ensure you are not, through your actions or inaction, contributing to pest plant problems. Take special care if you are travelling from other regions into Taranaki with equipment or goods that may contain plant material or seeds.

## Pest plant booklets available

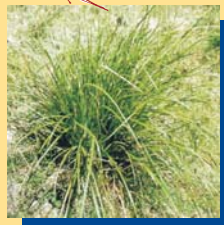


The Taranaki Regional Council has copies of the pictured booklets available for students to borrow for reference.

Websites which may also prove useful include:

- <http://www.landcareresearch.co.nz>
- <http://www.doc.govt.nz>
- <http://www.maf.govt.nz>

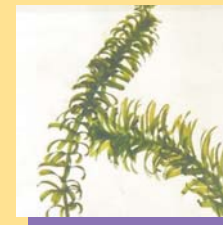
# Pest Plants in Taranaki



**Australian sedge**  
(*Carex longebrachiata*)  
Australian sedge is a tussock-forming, perennial sedge up to 90 cm tall. It has long, drooping, narrow cutting leaves and seed heads. Damages agricultural production, suppresses native plants.



**Giant reed**  
(*Arundo donax*)  
Perennial bamboo-like grass, 4-8m tall, pale green to blue-green leaves, tall plume-like flowers. Damage to ecological value through suppressing native plants, obstructs water flow.



**Oxygen weed**  
(*Egeria densa*)  
Perennial, multi-branched submerged herb, white flowers. Damage to recreational, ecological and aesthetic values on ponds, lakes and reservoirs.



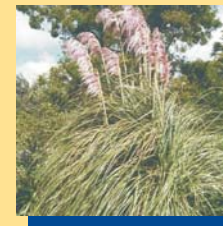
**Thistle - Variegated**  
(*Silybum marianum*)  
Robust, spiny thistle 0.5-2m tall, white veins and blotches on leaves.



**Brush wattle**  
(*Paraserianthes lophantha*)  
Evergreen tree up to 20 m tall. Damage caused to agricultural production through suppression of native plants.



**Gorse**  
(*Ulex europaeus*)  
Woody perennial shrub with sharp spines, 3-4m tall, yellow pea-like flowers. Damage to agricultural production through suppressing plants.



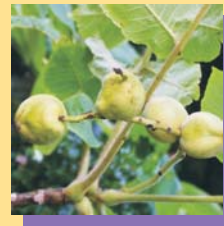
**Pampas - Purple**  
(*Cortaderia jubata*)  
Perennial tussock-forming giant grass, erect flowering stem, fluffy purple flowers. Damage to ecological and agricultural values through suppression of native plants.



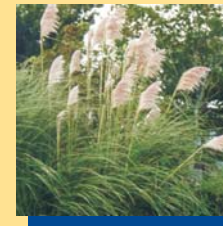
**Thistle - Plumeless**  
(*Carduus acanthoides*)  
Spiny biennial plant, small pink or purple flowers.



**Chilean rhubarb**  
(*Gunnera tinctoria*)  
Giant, clump-forming herb, large umbrella-shaped leaves, up to 5 flower stems per plant. 80,000 seeds per head. Damage to ecological value through suppression of native plants. Obstructs water flow in streams, wetlands.



**Japanese walnut**  
(*Juglans ailantifolia*)  
Quick growing deciduous tree up to 15m tall. Damages ecological values and disrupts water flow in channels and wetlands.



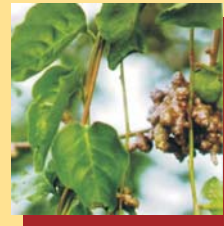
**Pampas - Common**  
(*Cortaderia selloana*)  
Perennial, tussock-forming giant grass, erect flowering stem, fluffy white flowers.



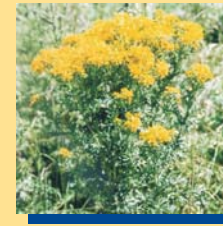
**Thistle - Nodding**  
(*Carduus nutans*)  
Erect annual or biennial plant up to 1.6 m. Spiny rosette leaves, fragrant pink or purple flowers. All thistles damage agricultural production through competition with pasture.



**Climbing spindleberry**  
(*Celastrus orbiculatus*)  
Deciduous, perennial, twining climber up to 12 m high, alternate, round toothed, glassy leaves with green flower and yellow and red fruit. Damages ecological and amenity values through competing with and excluding native plants.



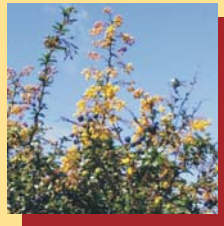
**Mignonette vine**  
(*Anredera cordifolia*)  
Perennial climber up to 7m, large fleshy heart-shaped leaves, large aerial tubers on stem, small fragrant cream flower. Damage to ecological and amenity value through excluding native plant growth.



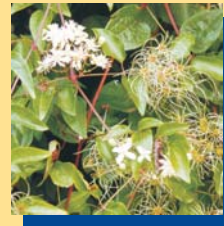
**Ragwort**  
(*Senecio jacobaea*)  
Erect biennial or perennial herb about 30-120cm tall, clusters of yellow flowers. Damage to agricultural production through competition with pasture, toxic to cows and horses.



**Wild broom**  
(*Cytisus scoparius*)  
Erect shrub up to 3m, ribbed with green stems and bright yellow pea-like flowers, then flattened, brownish-black seedpods. Damage to ecological value through suppression of native plants.



**Darwin's barberry**  
(*Berberis darwinii*)  
Woody evergreen shrub up to 5 m tall, small shiny dark green leaves, deep orange flowers. Damage to agricultural production and ecological value through excluding native plants.



**Old man's beard**  
(*Clematis vitalba*)  
Deciduous, woody perennial climber up to 25m, produces fluffy seeds. Damages ecological and amenity value by excluding native plants.



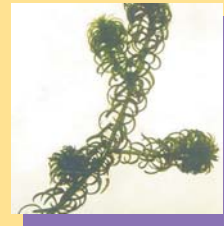
**Senegal tea**  
(*Gymnocoronis spilanthoides*)  
Perennial semi-aquatic herb, floating stems, up to 1.5m tall, ball-like flower heads, dark green leaves, hairless, shiny and serrated. Damage to recreational, ecological and aesthetic value, especially on ponds, lakes and reservoirs.



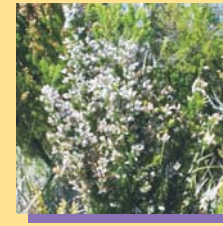
**Wild ginger - Kahili**  
(*Hedychium gardnerianum*)  
Robust, perennial herb 2-3m high, red seeds, long narrow wax covered leaves, lemon yellow flowers.



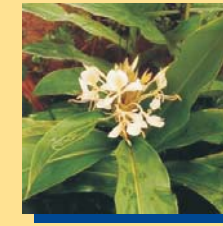
**Giant buttercup**  
(*Ranunculus acris*)  
Hairy perennial, 50 cm tall with clusters of yellow flowers. Damages agricultural production through suppressing pasture growth.



**Oxygen weed**  
(*Lagarosiphon major*)  
Perennial, submerged herb, spiralled leaves, tiny pink flower.



**Spanish heath**  
(*Erica lusitanica*)  
Erect woody perennial up to 3m tall, covered in light green, needle like leaves, small white/pink flowers. Damage to agricultural production through suppressing pasture, nuisance on roadside.



**Wild ginger - Yellow**  
(*Hedychium flavescens*)  
Robust, perennial herb 2-3m high. No seeds, long narrow wax covered leaves, cream to light yellow flowers. Damage to ecological value through excluding the growth of native plants.

■ Eradication - goal is to eradicate these plants

■ Containment - goal is to prevent the spread to new areas

■ Surveillance - goal is to monitor distribution and promote voluntary control