



# Australia's Tropical Rainforests

WORLD HERITAGE

## F A C T S H E E T

### Sleuths search for alien plants

Weeds are plants that grow where they are not wanted. They are plants in the wrong place.

There are over 500 agricultural and environmental weeds in Tropical North Queensland. They range from large trees such as the African Tulip to the ground cover Singapore Daisy.

Most of Tropical North Queensland's weeds come from places with similar tropical climates, like south-east Asia, South America and parts of Africa.

They arrive here in many different ways including through the mail, in cars, in ships and on people's clothing, shoes and even in their camping gear, but most come through plant nurseries.

Most of our weeds started life as garden plants or agricultural plants, then escaped into natural areas. This can happen naturally when wind and water spread their seeds. Sometimes birds and



bats eat the fruit and spread the seeds in their droppings. People also spread weeds when they dump unwanted prunings in the bush, or spread seeds on their shoes or vehicle tyres.

Gardeners and nurseries are always looking for new, interesting and hardy specimens which flower a lot. Unfortunately, being hardy means plants can adapt to different conditions, reproduce easily and are difficult to kill.

As human development spreads into natural areas, it is becoming more important to look after the natural places that still survive in urban areas. This includes our parks, playgrounds and sports fields. Removing weeds is a great way to encourage environmental diversity in these urban environments.



This innocent garden plant has escaped and become a weed.

#### What is a weed?

Weeds are a major threat to the Australian environment - as well as extremely costly for farmers. Plants like rubber vine have infested about 350,000 square kilometres of north Queensland - an area larger than the state of Victoria!

Weeds cause many problems:

- They replace native plants, which provide food and protection to wildlife.
- They choke waterways and wetlands, destroying creeks and river systems.
- They poison people, wildlife and livestock.
- They compete with food crops.
- They detract from our enjoyment of natural areas.

People mistakenly believe that a weed is a certain category of plant, but a weed is simply a plant out of place.

Plants don't have to be from overseas to be a weed. Native plants from north Queensland such as our local wattles can become a problem if they escape from gardens in southern states and grow wild and out of control.

Millions of years in the making. Protected forever.

## Activities using your Weed Pocket Guide

**1. Make a weed map.** Grab a weedbook and explore the school grounds or a nearby park for a suitable study site. Your local council pest officer might be able to make a few suggestions of a spot that has about 10 different weed species.

Create an A3 weed map of the school grounds or a nearby park. A weed map is like any other map. It must have a scale, north arrow, a title and a key to symbols and shading that have been used.

Use the Weed Pocket Guide to identify any weeds. Collect weed specimens (using a plastic bag so that you don't accidentally spread weeds) or use a digital camera to take photos of the weeds. Write down where you found them and the conditions. Was it sunny and open or under a tree in a shady area? Do some plants prefer to grow in certain positions and in certain environments?

### 2. More map information.

When mapping your school grounds or a nearby park, look for human impacts where people have worn away grass or broken vegetation. Look for other introduced animal species, such as the Cane Toad and Indian Myna birds. Which areas do these feral animals live in? Add these details to your map.

### 3. Make a weed herbarium.

You can dry the weeds using a flower press. Presses can be bought at craft shops, or simply place the weed in newspaper pages between some heavy books for 3-4 weeks. Put the pressed weeds in a scrapbook to create your own herbarium. Divide the plants in categories such as tree, shrub, herbaceous plants, grass, vines and water

weeds (like the Pocket Guide). It is illegal to collect native plants without a permit, so make sure they are weeds!

### 4. Take a closer look at leaves.

Look at the different leaf shapes of the weeds. Why are they so different? Use the leaves (but not ones with thorns!) to make leaf rubbings by placing each one under a thick sheet of paper and scribbling over it with a thick pencil or crayon. Write the weed's name underneath each leaf rubbing.

### 5. Choose a weed and study it.

How do the weeds in your collection spread? Do animals eat their fruits, does the wind blow seeds around, or do their roots spread under the ground? Do humans help to spread them? Do some research on the internet to see if you can find out how a plant has become a weed. Are there some positive aspects to the weeds, such as providing shade or food? Find out the recommended methods of controlling the weeds and develop an action plan. Present your findings to the class.

### 6. Weed story.

Pick one of the weeds that you have found, and turn it into the main character of a story that tells how the plant became a weed. Use the weed's natural characteristics in the

story. Present your story as a comic.

**7. Write a letter.** How have people changed the local environment by introducing weeds? What are the possible consequences if weeds take over the natural ecosystem? What are community groups, government agencies and the local council doing about weeds? Write a letter to your local council, state and federal politicians to explain how weeds can affect your local environment and what we should do about it.

**8. Create a poster.** Explore your own garden for environmental weeds. Could they escape from your garden? Develop a poster for display at your local plant nursery, explaining to gardeners that plants can escape from their gardens and become pests.

## Safety

If you are visiting a park which is overgrown, consider wearing trousers and closed shoes. A hat and sunscreen is also a good idea. Be very careful if handling weeds with thorns (eg. sensitive weed, giant bramble) and be careful not to get sap on your skin or clothing if cutting samples. Always wash your hands after handling plant material. Gloves are also a good idea.

Copies of the Wet Tropics Weed Pocket Guide are available from the Wet Tropics Management Authority or your local council. These activities have been adapted from the national Weebuster website and the Queensland Government's weebuster activity kit, both excellent resources for teachers and students.

Check out the websites:

[www.weebusters.info](http://www.weebusters.info)

[www.nrm.qld.gov.au/pests](http://www.nrm.qld.gov.au/pests)

Weebuster Week is held each year in October, and there are some great competitions and activities for your class.

Your local council's pest management officer has a lot of information about local weeds, and will be keen to share this knowledge.

