

Ghastly Guests



**Upper primary unit of work
investigating weeds**

Developed by: Susanna Greig, February 2005

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- 1.4b St John's wort
- 1.4c Bridal creeper
- 1.4d Lantana
- 1.4e Gorse
- 2.1 This is an image of a weed called 'take all' competing with plants in a cotton crop
- 2.3 Hawthorn
- Blackberry
- Dandelion
- Bathurst burr
- Spear thistle
- Noogoora burr
- 2.6 Activities causing weed spread



Introduction

Weeds are one of the greatest threats to the environment and agriculture in Australia today and yet many people know little about them. Due to their impact, the Australian Government established the Cooperative Research Centre (CRC) for Australian Weed Management with the aim of promoting research and education on weeds at all levels within the Australian community. As part of that objective, we have developed this unit of work for upper primary teachers nationwide. The unit is divided into three sections. Teachers may choose to follow the activities consecutively. This way each activity will complement those in previous sections and students will gain a more complete story. Alternatively teachers may select the activities from any of the three sections that suit their students and situation. The activities in this unit will span approximately ten weeks if two hours are dedicated to the unit each week. Alternatively the unit can be taught in a shorter condensed period.

The purpose of each section

1. What are weeds?

In this section, students will complete activities that introduce and describe weeds. Through this, students will discover some basic weed issues and develop an interest in this topic. The initial activity in this section involves the students identifying a villain weed in the setting of a court case. This activity develops the setting for the rest of the unit, but also provides an opportunity for the teacher to determine students' current understandings of what weeds are and look like.

2. Why are weeds such ghastly guests?

The activities in this section provide the opportunity for students to investigate weeds by completing a range of scientific experiments and activities. Students will discover the different adaptations of weeds, enabling them to spread and take over new areas. Students will study weed seed dispersal, weed seed dormancy and plant competition.

The experiments and activities in this section are also designed to enable students to develop scientific investigative skills such as: designing and carrying out fair tests; predicting; observing; designing models; recording; evaluating procedures; presenting; and analysing data collected to form conclusions.

Students use food webs to investigate the interactions between living things and appreciate the significant environmental problems associated with introduced species. Students also investigate actions resulting in weed spread and persuade others to avoid these.

3. Final projects

The activities in this section help students to apply the theory that they have studied to complete projects that are assessable. You may decide to do each final project, or pick those that suit your students and situation.

Unit arrangement

The unit is organised with the Teacher Notes for the three sections together at the start, followed by all Student Worksheets and then the Teacher Resources, while the Links to the Curriculum are at the end of the folder.

After looking over the Teacher Notes for each section, please do not hesitate to contact me with your questions, or for any further information.

Kind regards,

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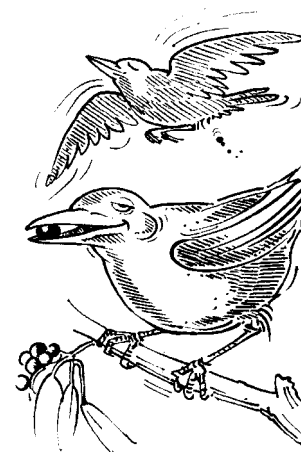
Website: www.weeds.crc.org.au





Guide to activities to assist planning and assessment

Activity number	Activity description	Start activity early as activity takes time	Resources supplied	Extra resources required	Assessable task?
1 What are weeds?					
1.1	Students demonstrate their current understanding of weed issues through a worksheet and brainstorming session.		<ul style="list-style-type: none"> • Student WS 1.1 		
1.2	Students will collect, press and then present weed samples. The students use these pressed samples to develop a labelled scientific drawing of a weed.	Yes	<ul style="list-style-type: none"> • Student WS 1.2 • Teacher Res 1.2 (diagram showing roles of plant parts) 	Materials listed in Teacher Notes	Yes
1.3	View as a class group, and then discuss the information on the PowerPoint presentation displaying the different types of weeds. This presentation provides the students with the opportunity to observe different weed types, and discover different things we can do to manage weeds.		<ul style="list-style-type: none"> • Student WS 1.3 • Teacher Res 1.3 (Ppt presentation. 'Introducing Weeds' on CD) 		
1.4	Students read comprehension passages and answer questions, which enable assessment across a range of comprehension skills. This is achieved with the 'here', 'hidden' and 'head' questions.		<ul style="list-style-type: none"> • Student WS 1.4a,b,c,d&e • Teacher Res 1.4a,b,c,d&e (images of weeds and comprehension suggested answers) 		Yes
1.5	Students do the maths calculations and use these answers with a code to work out the secret message.		<ul style="list-style-type: none"> • Student WS 1.5 		



Guide to activities to assist planning and assessment

Activity number	Activity description	Start activity early as activity takes time	Resources supplied	Extra resources required	Assessable task?
2 Why are weeds such ghastly guests?					
2.1	Students set up and carry out a fair test (scientific experiment) to investigate plant competition. In order to consolidate ideas from the experiment, students follow instructions on the worksheet to write up a scientific experimental report. This report could be a valuable assessment task.	Yes	<ul style="list-style-type: none"> Teacher Res 2.1 (Image of a cotton crop with a weed problem) Student WS 2.1 	Materials listed in Teacher Notes	Yes
2.2	Students predict results and then carry out an experiment to observe seed dormancy.	Yes	<ul style="list-style-type: none"> Student WS 2.2 	Materials listed in Teacher Notes	
2.3	Students work in groups looking at images of weed seeds. Students discuss and then agree on the dispersal method each seed uses. Students then justify their decisions giving reasons.		<ul style="list-style-type: none"> Teacher Res 2.3 (six images of weed seeds) 		
2.4	Students work in groups to design and make a wind dispersed seed. These seeds are then tested and evaluated.			Materials listed in Teacher Notes	Yes
2.5	Students learn how to draw food chains and webs and then use these to discover the impact introduced plants have in an environment due to the lack of natural predators.		<ul style="list-style-type: none"> Student WS 2.5 Teacher Res 2.5 (Ppt presentation 'The impacts of introduced plants' on CD) 		
2.6	Students identify from a cartoon poster the human and natural activities which cause weed spread. Students then develop their own brochure informing others of weed spread activities.		<ul style="list-style-type: none"> Teacher Res 2.6 (six posters of weed spread activities) Student WS 2.6 		Yes
2.7	Students use knowledge developed in section 2 'Why are weeds such ghastly guests?' to complete the cross word.		<ul style="list-style-type: none"> Student WS 2.7 		

Guide to activities to assist planning and assessment

Activity number	Activity description	Start activity early as activity takes time	Resources supplied	Extra resources required	Assessable task?
3 Final projects					
3.1	Students study a weedy area and ask prepared questions to an expert familiar with the area. The students then analyse the information collected and present their findings. This enables students to make a link between theory studied in the classroom and the outside world, and to use their understandings developed through the unit.	Yes		Organised guest speaker and a local weedy area	Yes
3.2	Students develop a well structured exposition/ argument in response to a statement using their understandings developed through the unit.				Yes
3.3	Students play the fun and challenging interactive computer game 'Weed Wipeout'.			Access to the internet	

Note

Assessable task?

Activities providing assessment opportunities are indicated.

These activities enable students to demonstrate understanding and a range of skills. These are suggestions only and exactly how the tasks are assessed will be determined by individual teachers.



