

Components

NAME	DESCRIPTION	AUDIENCE
<i>Animal interactions</i> teacher guide	This guide shows how a video and book extract may be used to engage student interest in feeding relationships and introduced species.	teachers
<i>Cane toads</i> background sheet	This background sheet summarises information about cane toads and problems they pose for native wildlife. Cane toads are used as an example of introduced species throughout this collection of resources.	teachers
<i>The food files</i> video	This news-style video discusses feeding relationships and introduced species.	students
<i>Toad rage</i> worksheet	An extract from <i>Toad Rage</i> , by Morris Gleitzman, followed by student questions, makes links between feeding relationships and introduced species.	students

Purpose

To **Engage** student interest in feeding relationships and introduced species.

Outcomes

Students:

- realise that living things are linked by what they eat;
- understand that introducing new species into an environment has impacts on plants, animals and feeding relationships;
- use prior knowledge and new ideas to engage with problems presented by introduced species; and
- assimilate ideas from a different perspective.

Activity summary

ACTIVITY	POSSIBLE STRATEGY
Students watch the video, <i>The food files</i> .	whole class
Class discussion of the video. See Teacher notes below for key questions.	whole class
Students use the worksheet, <i>Toad rage</i> , read a book extract, and answer questions. Discuss answers as a class.	individually then whole class

Technical requirements

The teacher guide, background sheet and worksheet require Adobe Reader (version 5 or later), which is a free download from www.adobe.com. The worksheet is also available in Microsoft Word format.

A modern browser (eg Internet Explorer 9 or later, Google Chrome, Safari 5.0+, Opera or Firefox) is required to view the video. A high quality MP4 version of the video is available by download from the SPICE website.

Teacher notes

QUESTION	SUGGESTED ANSWER	
small marsupials	shark ants rakali woylie bilby rufous hare wallaby burrowing bettong fox cat sea turtle black cockatoos bees cane toad caterpillar dingo wedge-tailed eagle snake	fish cockroach fish nuts nuts nuts nuts small marsupials small marsupials jellyfish seeds pollen and honey insects leaf small marsupials small marsupials cane toad
Why do animals eat?	Animals eat food to gain energy needed to perform all their daily activities.	
Name three introduced species seen in this video.	cats, foxes, bees, cane toads ...	
Why did people introduce each of these animals into an environment?	cats – as pets, for biological control (to catch mice) foxes – for sport bees – to pollinate introduced plants cane toads – biological control (cane beetles)	
What negative impacts could each of these introduced animals have on the native environment?	cats – prey on native animals foxes – prey on native animals bees – compete for shelter cane toads – poison native animals, may compete for food and shelter	

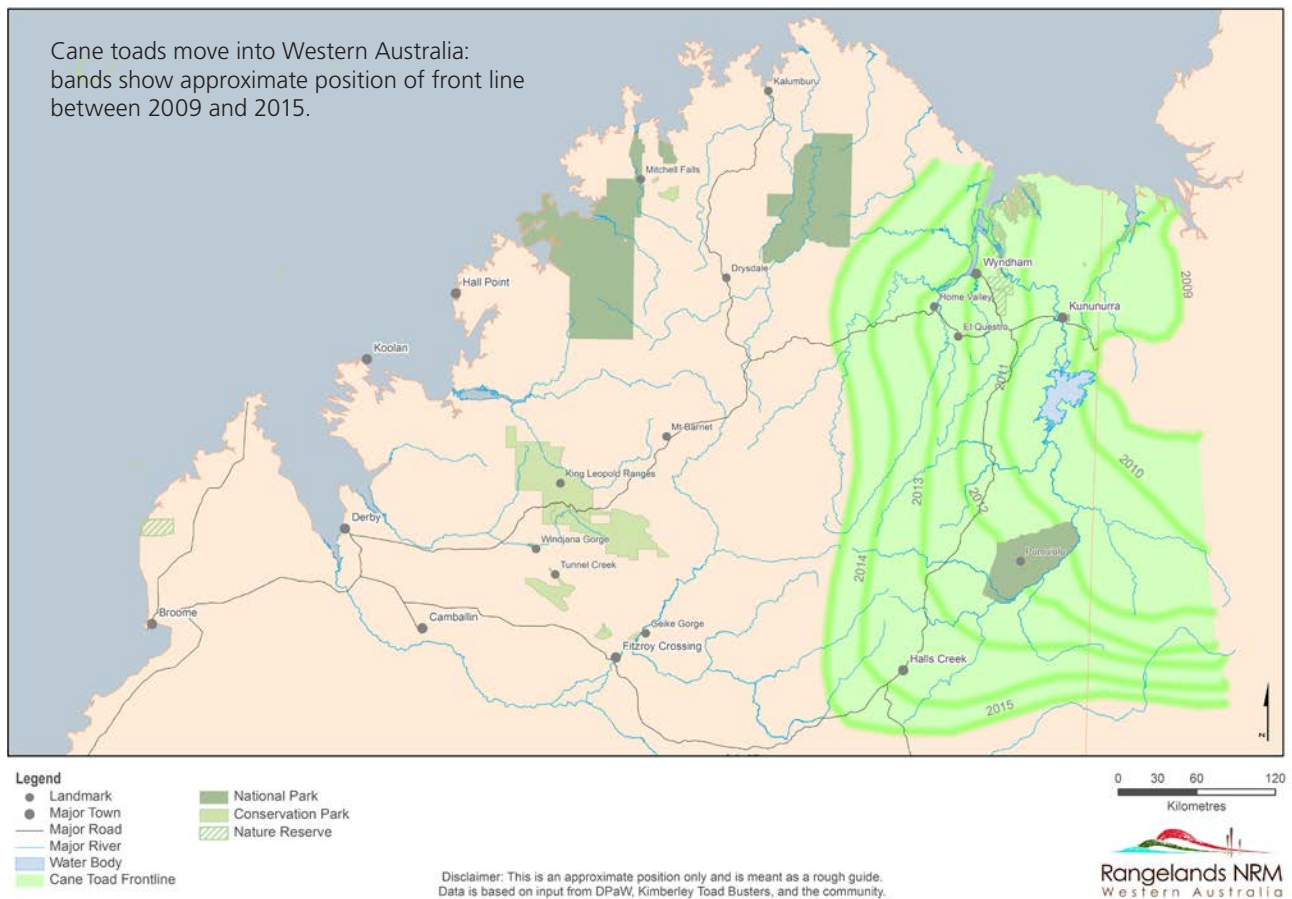


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Video presenters: Toby Travers and Yvette Leong.

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Associated SPICE resources

Feeding relationships 1: Animal interactions may be used in conjunction with related SPICE resources to address the broader topic of food chains and webs.

DESCRIPTION	LEARNING PURPOSE
<p><i>Feeding relationships (overview)</i></p> <p>This learning pathway shows how a number of SPICE resources can be combined to teach the topic of food chains and webs.</p>	
<p><i>Feeding relationships 1: Animal interactions</i></p> <p>Students watch a video designed to engage students and provoke questions about animal feeding relationships and introduced species. Students then read a book extract, raising further discussion about cane toads and their impacts.</p>	Engage
<p><i>Feeding relationships 2: Predators and prey</i></p> <p>Students explore concepts of feeding relationships and food chains by competing against each other in three activities: a quiz about what animals eat; a card game; and an outdoor role-play game.</p>	Explore
<p><i>Feeding relationships 3: Food webs</i></p> <p>Food webs are explained in a student fact sheet. Students use an iPad app or a cut-and-paste activity to create a food web that shows feeding relationships between animals in the Kimberley. Students introduce cane toads into their web to examine effects on other species in the ecosystem. They answer questions on an accompanying worksheet to check understanding.</p>	Explain
<p><i>Feeding relationships 4: Impact of cane toads</i></p> <p>This resource elaborates the topic of introduced species. Students watch video clips of people living in the Kimberley describing impacts of cane toads. An accompanying worksheet probes students' understanding.</p>	Elaborate
<p><i>Feeding relationships 5: Managing cane toads</i></p> <p>This resource extends and applies students' understanding of cane toads as an example of impacts caused by introduced species. Students suggest ways to solve the cane toad problem; read fact sheets that include up-to-date science research; and participate in a class debate to determine the best solution. They need to develop a persuasive argument that considers ethics, cost and viability of their option.</p>	Elaborate
<p><i>Feeding relationships 6: Kimberley creations</i></p> <p>This resource encourages students to employ techniques used in Aboriginal art to make their own symbolic representation of feeding relationships in an environment of their choice.</p>	Elaborate