



GOING...GOING...GONE! — GUIDED TOUR

By the end of Year 6, students are able to predict the effect of environmental change on living things. By incorporating this learning into an excursion-based unit of work, students can explore the topic based on interest areas, rather than participating in a teacher or curriculum driven unit. A visit to Currumbin Wildlife Sanctuary provides a holistic experience where the curriculum area is presented using real world examples and encounters, creating a meaningful teaching and learning experience.

Combining the knowledge from one of our experienced education officers, with the experience of “seeing” the curriculum, will help students to become engaged in the topic area.

YEAR LEVEL: Year 5/ 6, Stage 3

DESCRIPTION: Currumbin Wildlife Sanctuary contains a number of animals that are either endangered or critically endangered. Our world is rapidly changing and many of our plants and animals are struggling to adapt. Students will be introduced to several endangered species and will learn what scientists are doing to help them. Students will also gain an understanding of how they can act to change the future for these animals.

EXCURSION FORMAT: This excursion provides a mix of self-guided activities as well as a *guided exploration* of some endangered animals presented by one of our education officers

AUSTRALIAN CURRICULUM LINKS:

YEAR 5: ACSSU043; ACSIS231; ST3-10LW; ST3-11LW

YEAR 6: ACSIS093; ACSSU094

ACTIVITIES



BEFORE YOUR VISIT:

Consider what is meant by the term *endangered species*.

Endangered species background information:

There are over 50 species of Australian animals and 60 species of Australian plants that are extinct (Australian Government 2006). For these animals and plants it is too late, we cannot bring them back.

There are currently over 380 species of native animals and 1300 species of native plants that may become extinct in the near future. These are called threatened species. We can help these species.

What causes extinction?

The main reason for extinction is environmental change, specifically habitat destruction. Urban development can change habitats which leaves animals struggling to survive; development can also destroy habitats leaving



the animals with no place to live. Introducing exotic species to native environments can also affect the food webs within an ecosystem, such as the introduction of the cane toad. This changes the way an ecosystem would naturally operate, which means native species have reduced chances of survival.

What can we do?

There are many actions we can take that will help our threatened species:

You can learn about our native plants and wildlife, plant native plants, remove rubbish from the environment, remove environmental weeds, control domestic pets, not dump plants or animals in the bush, reuse or recycle items, and compost.

For further details see the Australian government publication: 'Green Kids Guide to Threatened Species'

<http://www.environment.gov.au/system/files/resources/b2129628-7852-4c30-b605-2aae352190d1/files/tsd06green-kids.pdf>

Activities

Have students research what the term endangered species means. What other terms are related to this (threatened species, extinct in the wild etc). Who determines if a species is extinct? or threatened? Are these terms specific to a geographic area? What animals are endangered or threatened in Australia?

Have students consider: What is biodiversity? Why is biodiversity important? Does it matter if some species become extinct?

DURING YOUR VISIT — SELF GUIDED:

We recommend exploring Currumbin Wildlife Sanctuary focusing on the following endangered or threatened species:

Located in Blinky Bills Home Tree (map reference B14): Mary River Turtle, Greater Bilby, Ghost Bat.

Located near the Kangaroo paddock (map reference U16): Brush-tailed Rock Wallaby.

Located in Lost Valley (map reference V14): Southern Cassowary, Red Panda, Goodfellow's Tree Kangaroo, Cotton-top Tamarin, Ring-tailed Lemur.

Located at map reference Q12, Q5, B15: Tasmanian Devil.

Located at map reference S5: Kroombit Tinker Frogs

(Please note: due to the critically endangered status of this species and the current active breeding program that is underway, these frogs are not on public display. There is a display describing the current conservation efforts for these frogs).

Located at Conservation Aviaries map reference Q6: Orange-bellied Parrots, Regent Honeyeater, Star Finch, Black-throated Finch.

If possible, exploring in groups of no more than 15-20 will ensure students have the most productive learning experience.



WILDLIFE DISCOVERY EXPERIENCE – LESSON – OPTIONAL – GUIDED TOUR

The guided tour will visit the following four animals:

Tasmanian Devils (Endangered)

Southern Cassowary (Least Concern)

Goodfellow's Tree Kangaroo (Endangered)

Cotton-top Tamarin (Critically Endangered)

Students will see each of these animal enclosures and be introduced to information about each of these animals. Students will consider why these animals are endangered and think about the potential future of each of these species. In doing this students will also become aware of what they are able to do to assist in resolving this global problem.

Students will have time to ask questions of our education officers (it would be great if questions could be prepared beforehand).

Please note: there is no direct animal interaction included in this presentation.

AFTER YOUR VISIT:

Analyse the information on the below worksheet and discuss the main reasons why certain species are endangered. Are some animals more subject to certain causes of extinction than others? Why is this?

Have the students choose an endangered animal and research and present a PowerPoint presentation about that animal. Make sure students include information about what government and individuals are doing to assist that species and why it would matter if these species become extinct. If possible, have students include information on what they can do to assist that species.



GOING...GOING...GONE! WORKSHEET

NOW YOU SEE ME. NOW YOU DON'T

Australia's biodiversity is currently in decline, in Australia, there are more than 1700 species and ecological communities which are threatened, or at risk of extinction.

Currumbin Wildlife Sanctuary, as well as many other zoos and animal sanctuaries in Australia play active roles in animal conservation and breeding programs.

While you are walking around Currumbin Wildlife Sanctuary, see if you can locate the following critically endangered species and determine why their numbers may be decreasing.

Species	Reasons why numbers are decreasing				
	Introduced/ feral animals	Animal Smuggling	Destruction of habitat	Water/Air pollution	Hunted by Humans
Greater Bilby					
Ghost Bat					
Brush-tailed Rock Wallaby					
Southern Cassowary					
Red Panda					
Goodfellow's Tree Kangaroo					
Cotton-top Tamarin					
Ring-tailed Lemur					
Tasmanian Devil					
Kroombit Tinker Frog					
Orange-bellied Parrots					
Regent Honeyeater					



DETAILED AUSTRALIAN CURRICULUM LINKS

Australian Curriculum links:		Elaborations:
<p>Year 5 Biological Sciences ACSSU043</p>	<p>Living things have structural features and adaptations that help them to survive in their environment</p>	<ul style="list-style-type: none"> • Explaining how particular adaptations help survival such as nocturnal behaviour, silvery coloured leaves of dune plants. • Describing and listing adaptations of living things suited for particular Australian environments. • Exploring general adaptations for particular environments such as adaptations that aid water conservation in deserts. • Researching organisms that live in extremes environments such as Antarctica or a desert. • Considering the effects of physical conditions causing migration and hibernation. • Applying experience from similar situations in the past to predict what might happen in a new situation. • Discussing how models represent scientific ideas and constructing physical models to demonstrate an aspect of scientific understanding. • Constructing multi-modal texts to communicate science ideas.
<p>Year 6 Biological Sciences ACSSU094</p>	<p>The growth and survival of living things are affected by physical conditions of their environment</p>	
<p>Science Inquiry Skills AC SIS231</p>	<p>With guidance, pose clarifying questions and make predictions about scientific investigations.</p>	
<p>AC SIS093</p>	<p>Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts.</p>	
NSW Syllabus links:	Outcomes	Content
<p>Stage 3 ST3-10LW</p>	<p>A student describes how structural features and other adaptations of living things help them to survive in their environment.</p>	<p>Living things have structural features and adaptations that help them to survive in their environment. (ACSSU043)</p> <p>Students:</p> <ul style="list-style-type: none"> • Observe and describe the structural features of some native Australian animals and plants • Present ideas and explanations about how the structural features and behaviour of some plants and animals help them to survive in their environment, eg shiny surfaces of leaves on sand dune plants and nocturnal behaviour in some animals <p>Students:</p> <ul style="list-style-type: none"> • Identify some physical conditions of a local environment, e.g. temperature, slope, wind speed, amount of light and water • Make predictions about how changing the physical conditions of the environment impacts on the growth and survival of living things. • Use gathered data to develop explanations about how changing the physical conditions of the environment affects the growth and survival of living things
<p>ST3-11LW</p>	<p>A student describes some physical conditions of the environment and how these affect the growth and survival of living things.</p>	