BACKYARD BUDDIES

Stage 1: Science & Technology
ST1-1WS-S, ST1-2DP-T, ST1-4LW-S

Become a Backyard Buddy! What native animals in your area could do with a helping hand? After running a fauna survey at your school, visit Taronga to learn how to create habitats for your local wildlife. Be prepared to get your hands dirty! Back at school, get busy creating homes for your Backyard Buddy friends.

OUTLINE

AT SCHOOL

Before you can build a habitat, you'll need to know the types of animals that live in the school grounds. Conduct a fauna survey of your school grounds or local environment and examine their habitats.

AT THE ZOO

Explore and discover natural animal habitats. Learn how animals' needs are met in nature.

ZOO WORKSHOP

Encounter live Australian animals and participate in hands on habitat creation activities such as creating a lizard lounge.

BACK AT SCHOOL

Create habitat for a 'backyard buddy' at home or school. Be prepared to get your hands dirty!

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For the Wild

AT SCHOOL - BEFORE THE ZOO

During your investigations of the needs of living things, your students will:

- Appreciate the importance of ensuring native animals have their needs met in urban environments.
- Investigate whether the needs of local wildlife are being met in your school grounds or local nature reserve.
- Plan, design and deliver a way to protect a local native animal in your schoolyard.

BECOME A BACKYARD BUDDY

WHAT IS A BACKYARD BUDDY?

Being a buddy means helping a friend in need. Many of the Australian native animals that live in our local area are really in need of a helping hand. They are not getting all of the things they need to survive.

A Backyard Buddy helps the Australian native animals that are finding life pretty tough.

Are you a Backyard Buddy?

WHAT DO BACKYARD BUDDIES NEED?

You know that living things need air, water, food and shelter to survive. For some animals trying to survive in an urban environment, even these simple things can be hard to find.

ACTIVITY

Brainstorm problems you think wild animals may face in an urban environment?
Consider pollution, cars, development, introduced predators, competition etc.

THE BACKYARD BUDDY PLEDGE

Are you ready to become a Backyard Buddy and promise to help the native animals that we share our homes with?
Great! Time to take the 'Backyard Buddy' pledge.
"I promise. To do my best. To help the native animals that share my home. I will be the best Backyard Buddy that I can be."

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AT SCHOOL - BEFORE THE ZOO

WILDLIFE SURVEY

A guided investigation into the presence and habitat needs of schoolyard wildlife.

SCIENTISTS INVESTIGATE

To find out what animals you can be helping in your local area – you'll need to complete an investigation!

Become a Scientist and conduct a fauna 'survey' of an area to identify what animals are there, what shouldn't be there and what is missing (see Activity 3).

Use this data to help you discover any problems with the wildlife in your area and then find ways to help (see Activity 4).

REFLECT

Imagine what your schoolyard would have looked like hundreds of years ago. Chances are there were a lot more trees and much fewer problems. Life is pretty tough for our native animals these days. Lucky you are now a Backyard Buddy!

1. CHOOSE A 'PATCH'

Use Google Earth or create a mud map of your school grounds or local reserve to determine a suitable area to survey. You may choose several locations.

2. USE YOUR SENSES

Find a 'patch' in the 'survey area' and lie down with your eyes closed. Use your senses to smell, and hear the signs of life around you. Also take a note of the unnatural sounds and smells not made by nature and discuss how they may affect the plants and animals in the area.

Use a sound recording device to record the sounds heard. This may come in handy for animal ID later.

3. SURVEY YOUR SCHOOLYARD

Use animal ID books, Wildlife ID apps, 'scats and tracks' guides plus the students' local knowledge to identify and record the animals in the schoolyard (or local nature reserve).

Don't forget to look for 'evidence' even if the animal is nowhere to be seen. For example, feathers, nests, dreys, web, scats (droppings), tracks, bird calls etc.

Use the 'Schoolyard Animal Survey' sheet (on page 7-8) provided to conduct your investigation.

4. ANALYSE YOUR RESULTS

You may have recorded several different animals in your 'Schoolyard Animal Survey'. Choosing a native animal to help may be a little tricky. Before you choose, can you tell the difference between a native, pet, pest or introduced animal?
Use the sheet provided on page 9 to test your knowledge.

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AT THE ZOO

Your Taronga Zoo excursion day and workshop experience

A SELF GUIDED EXCURSION DAY

EXPLORE THE ZOO

You'll see plenty of Zoo animals at Taronga Zoo, but you might be surprised how many wild, native animals also call Taronga Zoo home.

See if you can spot;

- a kookaburra
- a bird nest
- a water dragon
- a tree hollow
- a rainbow lorikeet
- a noisy minor
- a golden orb spider
- a possum drey.
- a brush turkey

TAKE PHOTOS

Wherever you see a native animal, evidence of the animal or it's habitat – photograph it. This evidence may come in handy when deciding which animal to help and learning how to help meet it's needs.

ZOO WORKSHOP

Your Zoo Workshop is located at the Backyard to Bush amphitheatre.

- During the workshop you will meet a variety of native Australian animals. Many of them can be found in people's backyards, local parks and reserves and even in your schoolyard.
- You will explore the bush area to discover habitats (made and natural) for native animals.
- You will also discuss ways people can help native animals meet their needs for survival.
- If you aren't already – this is the time to become a 'Backyard Buddy'

BEFORE YOU COME TO THE ZOO

Have you …

- Completed your schoolyard animal survey?
- Become a Backyard Buddy?

TARONGA ZOO

For the Wild

BACK AT SCHOOL - AFTER THE ZOO

Ok Buddies – you are well on your way to helping local wildlife now. Time to choose a species, get everyone on board , make a plan and – take action!

BUDDIES TAKE ACTION

DECISION TIME

Has your class decided on a native animal that needs your help? There may be many and it may be hard to choose. Remember – creating habitat and removing problems for one type of animal, usually helps many more.

ACTIVITY

Use the 'needs analysis' process to help your class decide on a native animal to receive your Backyard Buddy help. See the 'Choosing your Buddy' activity on page 10.

PESTER POWER!

Great work Buddies - you've chosen an animal to help. But that's not enough – next you'll need to convince the rest of the class and maybe even your school Principal for permission!

BACKYARD BUDDY ACTION PLAN

1. What animal needs your help and why?
2. What needs to be done? Who can help and who needs persuading?
3. Research, design your habitat and write a procedure on what to do with detailed instructions.
4. Collect materials and allocate roles.
5. Complete your habitat restoration project
6. Evaluate and reflect on the success of the project with advice for future years.

SOME USEFUL LINKS

Australian Museum (animals)
http://australianmuseum.net.au/animals

Birds in Backyards (bird habitat guidelines)
http://www.birdsinbackyards.net/Guidelines-Creating-Bird-Habitats

NSW DEC, Curriculum Support (Sustainability Action Process)
http://www.environment.nsw.gov.au/sustainableschools/cross-curriculum.htm

Introduced species in Australia
http://en.wikipedia.org/wiki/List_of_introduced_species

NPWS Backyard Buddies (how to make habitats for natives)
http://www.backyardbuddies.net.au/

Wires (Voluntary wildlife rescue)
www.wires.org.au/

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SYLLABUS LINKS

SYLLABUS OUTCOMES

LIVING WORLD

- observes, questions and collects data to communicate and compare ideas ST1-1WS-S
- describes observable features of living things and their environments ST1-4LW-S

Skills Focus
Working scientifically
Planning and conducting investigations

- explore and answer questions through participation in guided scientific investigations
- compare observations with those of others
- develop collaboration skills to effectively conduct investigations
- make safe choices when using materials and equipment

Content
External features of living things
Inquiry question: What are the external features of living things?
Students:

- describe the external features of a variety of living things
- identify and group plants and animals using their external features

Living things live in different places
Inquiry question: How can we improve a local environment to encourage living things to thrive?
Students:

- identify that living things live in different places that suit their needs
- recognise that people use science and technology in their daily lives, including when caring for their environment and living things

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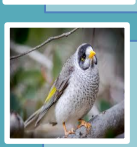
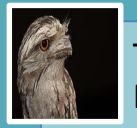
SCHOOLYARD ANIMAL SURVEY

Investigate your school grounds or a nearby park/reserve. Use the worksheet to record sightings. Remember to use all your senses and also look for other evidence.

return to linked page

BIRDS	Tally
Common Ibis	
 Noisy Miner	
Rainbow Lorikeet	
Indian Myna	
Cockatoo	
Pigeon	
Seagull	
 Tawny Frogmouth	
Plover	

OTHER EVIDENCE OF BIRDS

Try to identify the birds that left the evidence you discover.

- Feathers ☐
- Nests ☐
- Bird call ☐
- Bird eggs ☐
- Bird droppings ☐

ANALYSE YOUR RESULTS

1. How many birds did you discover? _____

2. Which bird was the most common?

_____

3. Which birds were 'missing'?* _____

_____

4. Put a line through the birds that are introduced or pest species. Use your 'Native animal Identifier sheet' to help you'.

* not found but *should* be living in the area.

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SCHOOLYARD ANIMAL SURVEY (CONTINUED)

Investigate your school grounds or a nearby park/reserve. Use the worksheet to record sightings. Remember to use all your senses and also look for other evidence.

return to linked page

MAMMALS	Tally
Fox	
Sugar Glider	
Native Rat	
Black Rat	
Flying Fox	
Ringtail Possum	
Brushtail Possum	
Bandicoot	
Cat	

OTHER EVIDENCE OF MAMMALS

Try to identify the birds that left the evidence you discover.

- Fur ☐
- Drey (possum home) ☐
- Burrow/tunnel ☐
- Droppings ☐
- Footprints ☐

ANALYSE YOUR RESULTS

1. How many mammals did you discover?

_____

2. Which mammal was the most common?

_____

3. Which mammals were 'missing'?*

_____

_____

4. Put a line through the mammals that are introduced or pest species..

* not found but *should* be living in the area.

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NATIVE, INTRODUCED, PEST OR PET?

Familiar faces in your local area may not be Australian natives after all.
Can you tell the difference?
Even some native animals or our pets can be pests for other native animals.

return to linked page

Stick Insect

Galah

Water Dragon

Willy Wagtail

Diamond Python

Green Tree Frog

Tawny Frogmouth

Ringtail Possum

Orb Spider

Indian Myna

Grey Headed Flying Fox

Dog

Cat

Sparrow

Blue Tongue Lizard

Ibis

Noisy Miner

Brushtail Possum

Rainbow Lorikeet

Black Rat

QUESTIONS

1. Five of these animals are not native animals. That means they do not come from Australia.
   One of them came to Australia by accident in the ships of the First Fleet! The others were introduced on purpose.
   Can you find them?
2. Which one catches wildlife if you let it outside the house at night?
3. Which one is a bully to native birds and takes their homes?

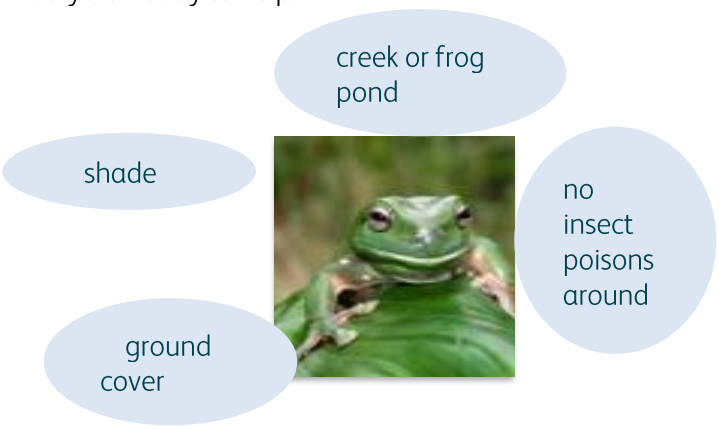
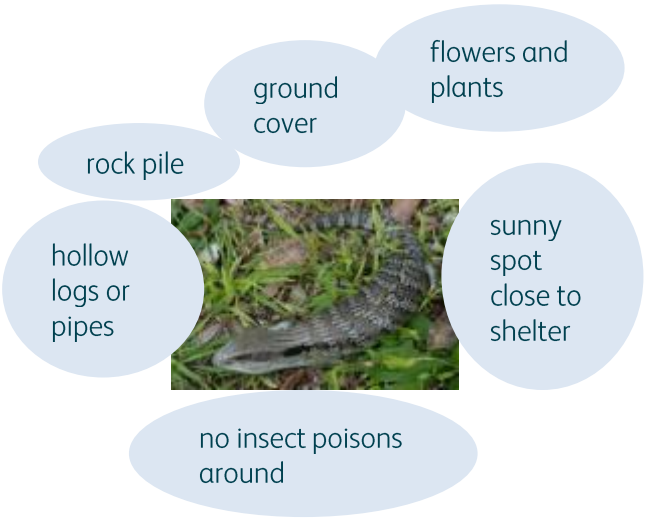
CHOOSING YOUR BUDDY

It's often hard to choose just one Backyard Buddy.
They all could do with a helping hand!

return to linked page

INSTRUCTIONS

1. Choose 4 animals and create a poster on each with the animal in the centre and bubbles surrounding it (examples are provided below).
   NB – your class might choose an animal that was not found in the school ground but is known to live nearby.

2. For each animal, guide a brainstorm on their particular needs given their (most likely) urban setting.

3. Tick the needs that are already being met for the animals and circle the ones that you think they are in need of help.
   Cross the ones that you can't do much about.
4. Once completed, use the data to help your class agree on a Backyard Buddy to help.