

# ADOPT A BUSHLAND

## YEAR FOUR TO FIVE TEACHERS GUIDE

### WHO LIVES HERE? / WHAT DO I EAT? / WHAT ARE MY FEET USED FOR?

Students will look at how plants and animals are interdependent. *Who lives here?* looks at where animals live and how plants are important in providing shelter for animals. In *What do I eat?* *What are my feet used for?* students will look at beak adaptations for eating and feet adaptations of birds.



## Sciences

Year	Content Description	Elaborations	Teaching Points
Four	<b>Science Understanding /Biological Sciences</b> Living things, including plants and animals, depend on each other and the environment to survive. <b>ACSSU073</b>	<ul style="list-style-type: none"><li>Investigating how plants provide shelter for animals.</li><li>Investigating the roles of living things in a habitat, for instance producers, consumers or decomposers.</li></ul>	<ul style="list-style-type: none"><li>Discuss how living things all have a role to play in a habitat e.g.<ul style="list-style-type: none"><li>provide shelter;</li><li>food source;</li><li>produce oxygen; and</li><li>decompose dead living things.</li></ul></li><li>Terms: producer, consumer, decomposer.</li></ul>
Five	<b>Science Understanding /Biological Sciences</b> Living things have structural features and adaptations that help them to survive in their environment. <b>ACSSU043</b>	<ul style="list-style-type: none"><li>Explaining how particular adaptations help survival such as nocturnal behaviour or silvery coloured leaves of dune plants.</li><li>Describing and listing adaptations of living things suited for particular Australian environments.</li><li>Exploring general adaptations for particular environments such as adaptations that aid water conservation in deserts.</li></ul>	<ul style="list-style-type: none"><li>Define adaptation as a characteristic that helps a living thing to survive.</li><li>Adaptations can be:<ul style="list-style-type: none"><li>structural - how it is made;</li><li>behavioural - what it does; and</li><li>functional - how it works.</li></ul></li><li>Examples of adaptations e.g.<ul style="list-style-type: none"><li>waxy leaves to conserve water (structural);</li><li>resting in the hottest part of the day to conserve water (behavioural); and</li><li>reptiles going into torpor during winter (functional).</li></ul></li></ul>

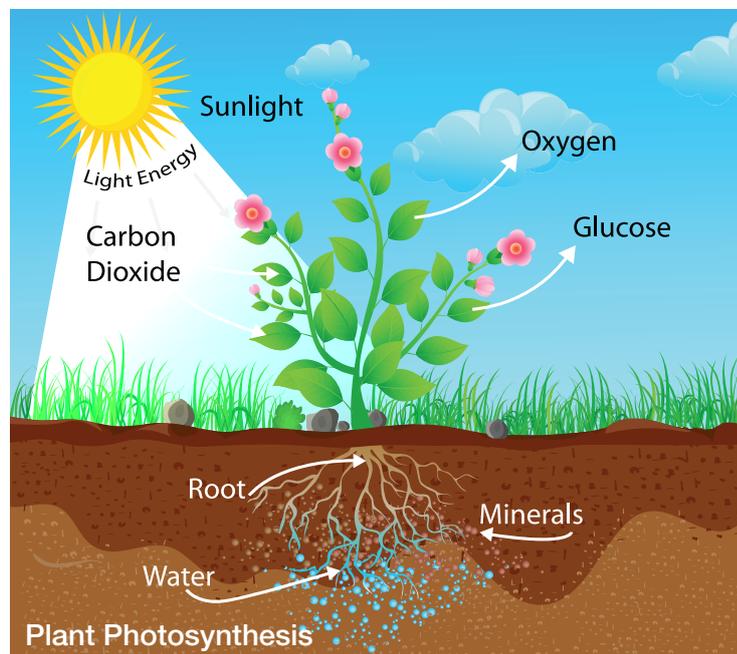
# Geography

Year	Content Description	Elaborations	Teaching Points
<b>Four</b>	<p><b>Geographical Knowledge and Understanding</b></p> <p>The types of natural vegetation and the significance of vegetation to the environment and to people.</p> <p><b>ACHGKO21</b></p>	<ul style="list-style-type: none"> <li>Exploring how vegetation produces the oxygen all land animals (including people) breathe; protects land from erosion by water or wind; retains rainfall; provides habitat for animals; shelters crops and livestock; provides shade for people; cools urban places; produces medicines, wood and fibre; and can make places appear more attractive.</li> </ul>	<ul style="list-style-type: none"> <li>Discuss the role plants play in a community.</li> </ul> <p>Extension</p> <ul style="list-style-type: none"> <li>Carbon cycle               <ul style="list-style-type: none"> <li>photosynthesis (carbon dioxide + water + sunlight → oxygen + sugars [glucose])</li> <li>respiration (oxygen + sugars [glucose] → carbon dioxide + water + energy)</li> </ul> </li> </ul>
<b>Five</b>	No relevant curriculum		

## Who lives here?

- Prior to reading the text have a discussion about the type of animals and plants students have seen in their local bushland. Talk about how every living thing has a role to play and that all living things are interdependent. Discuss how plants supply oxygen made from the carbon dioxide people exhale. This may be represented in a cyclic diagram such as the one below.
  - During the day plants photosynthesise using carbon dioxide, water and sunlight to produce oxygen and sugars (glucose).
  - Plants AND animals respire ALL the time. Respiration uses oxygen to release energy from sugars (glucose). The by-products are carbon dioxide and water.

- You may like to complete some pre-reading vocabulary exercises depending on the reading level of your students, such as:
  - Skimming to pick out words they do not understand, then discussing the meaning.
  - Scrambled animal names.
  - Spelling list.
  - Watch a video about the Australian bushland.
- Read the text in small groups or as a class, taking note of where the animal lives. After reading, students draw the animals into the picture.





**What do I eat? /  
What are my feet used for?**

- Discuss adaptations with class. Adaptations are features that help an animal (or plant) to survive. They can be structural, behavioural and physiological, for example:
  - waxy leaves to prevent water loss e.g. gum tree leaves (structural);
  - resting in the heat of the day to conserve water e.g. kangaroo (behavioural); or
  - shivering to get warmer e.g. humans (functional).

- Watch a video or look at some poster pictures of animals and discuss what adaptations they may have.
- With the *What do I eat? What are my feet used for?* worksheet, have students work in small groups. Students are to discuss each beak/foot, make decisions based on evidence and complete the table. You may like to put the names of the birds on the board.

**Answers**

**What do I eat?**

Beak Adaptations			
Beak	Bird	Food	Reasons
1	Willie Wagtail	insects	Short sharp beak, works like a pincer, good for capturing insects.
2	Falcon	insects, birds, reptiles e.g. lizards and snakes, small mammals such as rabbits and bats	Sharp strong beak for grasping, tearing meat.
3	Honeyeater	nectar, insects	Fine, slightly curved beak for reaching into flowers.
4	Cockatoo	seeds, nuts, berries, roots	Strong, robust beak – like a nutcracker.
5	Tawny Frogmouth	lizards, frogs, birds, insects, worms, slugs, snails, small mammals	Short, sharp beak.
6	Wattlebird	nectar, some insects, flowers, berries, some seeds, fruit	Short, slender beak for probing into flowers.

**What are my feet used for?**

Feet Adaptations			
Foot	Bird	Used for	Reasons
1	Cockatoo	perching/grasping	Rounded, three toes at front and one back toe for grasping branches and prey.
2	Falcon	grasping	Strong toes and sharp talons for grasping prey and tearing apart.
3	Wattlebird	perching	Small talons, rounded toes for holding onto branches.
4	Willie Wagtail	perching, hopping	Small talons, slightly flatter spread to toes.