



BUG BUDDIES

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.

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

YEAR LEVEL: Prep/ Early Stage 1, Year 1, Year 2

DESCRIPTION: By exploring the properties of familiar living things (insects), students will understand the external features and changes that living things undergo during their lifetimes. They will discover that all living things have specific needs that must be met in order to survive and thrive. Students will be able to relate this information to how areas in our environment (habitats) support the needs of all living things.

EXCURSION FORMAT: This excursion provides a mix of self-guided activities as well as a lesson presented by one of our educators. Students will be able to explore the properties of insects, as well as meet and interact with some of our resident bug buddies.

AUSTRALIAN CURRICULUM LINKS:

PREP: ACSSU002; ACSIS014; ACSIS233; ACSIS012 / STe-8NE; STe-4WS

YEAR 1: ACSSU017; ACSSU211; ACSHE022; ACSIS024; ACSIS029 / ST1-10LW; ST1-11LW; ST1-4WS;

YEAR 2: ACSSU030; ACSHE035; ACSIS037; ACSIS041

ACTIVITIES



BEFORE YOUR VISIT:

SURVIVAL:

Tell the students that they are going camping for a week. Ask them what they need to pack in order to survive. Create a packing list (cut and paste from magazines).

What items on the list do they NEED to survive? What items are not essential?

Consider animals, they don't “pack things”, how do they get what they need to survive?

How does their environment provide what they need to survive?



GROWING AND CHANGING

Read “The very Hungry Caterpillar” by Eric Carle. Discuss the lifecycles of familiar animals (caterpillars, frogs, humans, etc.). What do we mean when we say lifecycle? Have students make their own caterpillar life cycle.

Inquiry questions:

Caterpillars change a lot as they grow? Do all animals change a lot as they grow? Have students bring in a baby photo of themselves. How have they changed as they have grown? Brainstorm some animals that change a lot as they grow and some animals that do not change much as they grow.

HABITATS

Consider the different habitats of animals. Have students make a collage of different animal habitats and the animals that may be found in them.

Inquiry questions:

What do we mean when we talk about an animal habitat? Do different habitats support different numbers/types of animals? Who is responsible for looking after animal habitats? What happens if animal habitats are not looked after?

DURING YOUR VISIT — SELF GUIDED:

As you move around Currumbin Wildlife Sanctuary, looking at the animal enclosures, consider the following questions:

1. What animals live in this enclosure/habitat?
2. How does this enclosure/habitat provide what the animals need (food, water, shelter, air)?
3. What bug buddies could also live in this enclosure?
4. How can this enclosure provide what the bug buddies need?
5. Do the bug buddies and the large animals have the same needs?

Have students draw an animal enclosure of their choosing and show how it provides for the needs of both insects and larger animals. Complete the Bug Buddies Habitats worksheet (Appendix 1) as you move around the sanctuary.



WILDLIFE DISCOVERY EXPERIENCE — LESSON — OPTIONAL

Our education officer will introduce your students to some bug buddies and one large animal (animals chosen may vary depending on animal health and availability).

Students will:

Examine each animal and determine their needs and habitats.

Find a suitable place for each animal to live based on its needs.

Students will compare and contrast the needs of insects with the needs of a larger animal.

Consider the lifecycle of each animal (noting the comparison between animals and their offspring).

Look at how a natural environment provides the habitat and life cycle of each animal.

Look at how our enclosures provide these habits and allow animals to complete their life cycles.

Students will have the opportunity to interact with some of the bug buddies and through this interaction will determine that all animals have similar needs, even when they have different appearances.

AFTER YOUR VISIT:

Here are a few ideas once you return to school:

Have your students draw or make models of their favourite bug buddy and where they live. Have the students' show how the areas where animals live provide for the needs of the animals.

Read the book "Possum Magic" by Mem Fox. Discuss if Anzac biscuits and vegemite sandwiches provide the food that possums need to survive? What can happen to animals that eat the wrong foods?

Have students make a bug 'zoo'. Consider the needs of different insects and what habitat would support those needs. Ensure students also take into account what the juvenile forms of the animal would require (e.g. eggs, caterpillars, butterflies).

Have students draw an animal habitat of their choosing and show how it provides for the needs of both insects and larger animals.

Have students find pictures of animals that live in similar habitats. What characteristics allow these animals to live together? What features do they share? (refer to pre-visit activity)



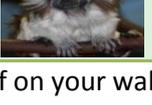
BUG BUDDIES WORKSHEET

Animals live in many different places on earth. These places can include oceans, deserts, rainforests and grasslands as well as many others. The place where an animal lives is called a habitat. Habitats contain everything an animal needs to survive. An animal may need a very small habitat or a very large habitat, each animal is different.

Look at some of the animals at Currumbin Wildlife Sanctuary and check out their habitats.

CAN YOU FIND THESE ANIMALS IN THE SANCTUARY?

An animal that has:

	How many did you find?	Draw a bug buddy that could share this habitat.
On land		
In trees		
Underground		
In the forest		
In a river		
In your backyard		
In a large area		
In a small area		
In a group		

What can you find yourself on your walk around the Sanctuary?

1.

2.



DETAILED AUSTRALIAN CURRICULUM LINKS

Australian Curriculum links:		Elaborations:
Foundation Year	Living things have basic needs, including food and water.	Recognising the needs of living things in a range of situations such as pets at home, plants in the garden or plants and animals in bushland.
ACSSU002		
ACSIS014	Pose and respond to questions about familiar objects and events.	Considering questions relating to the home and school and objects used in everyday life.
	Engage in discussions about observations and represent ideas.	
ACSIS233	Share observations and ideas.	Taking part in informal and guided discussions relating to students' observations.
	Living things have a variety of external features.	
ACSIS012	Living things live in different places where their needs are met.	Working in groups to describe what students have done and what they have found out.
Year 1		Recognising common features of animals such as head, legs and wings.
ACSSU017		Describing the use of animal body parts for particular purposes such as moving and feeding.
	People use science in their daily lives, including when caring for the environment and living things.	Exploring different habitats in the local environment such as the beach, bush and backyard.
ACSSU211	Pose and respond to questions, and make predictions about familiar objects and events.	Recognising that different living things live in different places such as land and water.
	Represent and communicate observations and ideas in a variety of ways.	Exploring what happens when habitats change and some living things can no longer have their needs met.
ACSHE022		Identifying way that science knowledge is used in the care of the local environment such as animal habitats, and suggesting changes to parks and gardens to better meet the needs of native animals.
		Thinking about "What will happen if?" type questions about everyday

<p>AC SIS024</p>	<p>Living things grow, change and have offspring similar to themselves.</p>	<p>objects and events.</p> <p>Using the senses to explore the local environment to pose interesting questions and making predictions about what will happen.</p>
<p>AC SIS029</p>	<p>People use science in their daily lives, including when caring for their environment and living things.</p>	<p>Engaging whole class or guided small group discussions to share observations and ideas.</p>
<p>Year 2 AC SSU030</p>	<p>Pose and respond to questions, and make predictions about familiar objects and events.</p> <p>Compare observations with those of others.</p>	<p>Recognising that living things have predictable characteristics at different stages of development.</p> <p>Exploring different characteristics of life stages in animals such as egg, caterpillar and butterfly.</p> <p>Observing that all animals have offspring, usually with two parents.</p>
<p>AC SHE035</p>		<p>Recognizing that many living things rely on resources that may be threatened and that science understanding can contribute to the preservation of such resources.</p>
<p>AC SIS037</p>		<p>Using the senses to explore the local environment to pose interesting questions, make inferences and predictions.</p> <p>Thinking about “What will happen if...?” type questions about everyday objects and events.</p>
<p>AC SIS041</p>		<p>Discussing observations with other students to see similarities and differences in results.</p>

NSW Syllabus links:	Outcomes	Content
<p>Early Stage 1</p> <p>STe-8NE</p>	<p>A student identifies the basic needs of living things.</p>	<p>Living things have basic needs, including food and water. (ACSSU002)</p> <p>Students:</p> <p>Describe what plants and animals, including humans, need to stay alive and healthy, e.g. food, water and air.</p> <p>Identify the needs of a variety of living things in a range of situations, e.g. pets at home, plants in the garden or plants and animals in bushland and/or on farms.</p>
<p>STe-4WS</p>	<p>Explores their immediate surroundings by questioning, observing using their senses and communicating to share their observations and ideas</p>	<p>Students question and predict by:</p> <p>Responding to questions about familiar objects and events they are curious about in the natural and made environments.</p> <p>Making predictions resulting from their questions.</p> <p>(ACSSU014, ACSSU233)</p>
<p>Stage 1</p> <p>ST1-10LW</p>	<p>A student describes external features, changes in and growth of living things (ST1-10LW).</p>	<p>Living things have a variety of external features. (ACSSU017)</p> <p>Students:</p> <p>Describe some external features of a variety of living things, including plants and animals.</p> <p>Use a range of methods, including <u>fieldwork</u>, to identify plants or animals in their local area.</p> <p>Devise simple classification systems based on the observable external features of plants or animals identified in the local area.</p>
<p>ST1-11LW</p>	<p>A student describes ways that different places in the environment provide for the needs of living things (ST1-11LW).</p>	<p>Living things grow, change and have offspring similar to themselves. (ACSSU030)</p> <p>Students:</p> <p>Compare the appearance of adult living things with their offspring, e.g. trees, insects, birds, reptiles, cats or humans.</p> <p>Living things live in different places where their needs are met. (ACSSU211)</p> <p>Students:</p> <p>Observe the different places in a local land or aquatic environment where living things can be found, e.g. a schoolyard, pond, beach or bush.</p> <p>Explore the needs of a plant or an animal in its environment.</p> <p>Describe how some different places in a local land or aquatic environment provide for the needs of the animals or plants that live there.</p> <p>Observe and record ways people use science knowledge and skills in their daily lives to care for living things, such as gardeners, farmers or pet carers. (ACSHE022, ACSHE035)</p>



ST1-4WS	A student investigates questions and predictions by collecting and recording data, sharing and reflecting on their experiences and comparing what they and others know.	Students question and predict by: responding to and posing questions (ACIS024, ACIS0037) making predictions about familiar objects and events and the outcomes of investigations (ACIS024, ACIS037)
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