TEACHING NOTES



BACKYARD BUGS

HELEN MILROY ISBN (HB): 9781760990282 YEAR LEVEL: K-3

CROSS-CURRICULUM PRIORITIES: Aboriginal and Torres Strait

Islander histories and cultures; Sustainability

ABOUT THE BOOK

From creepy crawlies to beautiful butterflies and kaleidoscopic Christmas beetles, Indigenous author and illustrator Helen Milroy returns to the backyard with a picture book destined to teach kids (and their handlers) all about the scurrying, scuttling, scooting, buzzing, zooming splendour of insects.

ABOUT THE AUTHOR

Helen Milroy is a descendant of the Palyku people of the Pilbara region of Western Australia. She was born and educated in Perth. Helen has always had a passionate interest in health and wellbeing, especially for children. Helen studied medicine at the University of Western Australia. She is currently a professor at the University of Western Australia, Consultant Child and Adolescent Psychiatrist, and Commissioner with the National Mental Health Commission. Helen was recently appointed as the AFL's first Indigenous Commissioner. Her books for children include *Wombat, Mudlark and Other Stories* (2019) and *Backyard Birds* (2020).

THEMES

- Insects
- · Backyard animals
- Observing nature
- · Celebrating nature
- · Connecting with your environment

AUSTRALIAN CURRICULUM OUTCOMES

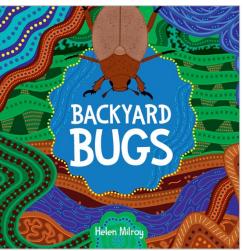
K-3 English

K-3 Biological Sciences

K-3 Visual Art

USEFUL WEBSITES

- Australian Museum 'Insects': https://australian.museum/learn/animals/insects
- Australian Museum 'Spiders': https://australian.museum/learn/animals/spiders
- Australian Museum 'Are worms insects or animals': https://australian.museum/learn/species-identification/ask-an-expert/are-worms-insects-or-animals
- Australian Museum 'Introduced snails in Australia': https://australian.museum/learn/animals/molluscs/introduced-snails-in-australia
- Australian Museum 'Pollination': https://australian.museum/learn/animals/insects/pollination
- Australian Museum 'Insect bites and stings': https://australian.museum/learn/animals/insects/insect-bites-and-stings
- Backyard Buddies 'Bugs & Insects': https://www.backyardbuddies.org.au/explore/bugs-and-insects





TEACHING NOTES



CLASSROOM IDEAS

Discussion questions

- 1. Backyard Bugs mentions ten different creatures (see the last page of the book for a picture of all ten). Which of these creatures is the slowest? Which is the fastest? Which of these have wings? Which creature (only one!) has eight legs? Which of these must we watch out for as they can sting or bite us?
- 2. Which of these creatures have you seen before? Where did you see them? Do you remember what they were doing and how they behaved?
- 3. What other small creatures have you seen around your area? Are they more common during a certain time of year? Do they come out during a certain time of day?
- 4. Animals have more than one name. For example, the first animal in the book has the **common name** of ant. It has the **scientific name** of *Formicidae*. And it has the **Indigenous name** of bidit (this name is in the Noongar language of the Noongar people from the south-west of Western Australia). Some animals have several common names and several Indigenous names. What Indigenous languages are spoken in the area where you live? Find out insect names in these languages.
- 5. What illustration style has Helen Milroy used in the book? Do any colours repeat in all the illustrations?
- 6. Which is your favourite illustration in the book and why?
- 7. What is 'pollination'? Why is pollination important? What role do insects play in it?
- 8. In addition to pollination, what other important 'jobs' do insects perform?
- 9. What are 'beneficial insects'? What can we do to attract beneficial insects to our backyards?

Biological sciences

- Seven of the animals in Backyard Bugs are insects but three of them are not!
 (Useful links: https://australian.museum/learn/species-identification/ask-an-expert/are-worms-insects-or-animals;
 https://australian.museum/learn/animals/molluscs/snails-and-slugs)
 - a. Can you guess which three are not insects?
 - b. If these three are not called insects, then what are they called?
 - c. What other creatures are they related to? Use the table below to list other members of each group:

Arachnids	Annelids	Molluscs
spiders	earthworms	snails

2. To help scientists study and understand nature, every plant and animal has been given its own scientific name in the Latin language. Match each creature listed in the left column with its correct scientific (Latin) name in the right column. An example is shown.

ant 🛌	Lepidoptera	
dragonfly	Anthophila	
earthworm	Araneae	
beetle	Grylloidea	
cricket	Gastropoda	
bee	Annelida	
butterfly	Coccinellidae	
spider	Formicidae	
snail and slug	Coleoptera	
ladybird	Anisoptera	

- 3. To identify animals, we observe the way they look and behave.
 - a. Choose a creature from *Backyard Bugs* and write down as many of its features as possible (e.g. for the ant, you might write: small, black, has six legs, has antennae, works hard, often found in big groups walking in a line inside houses, etc.).
 - b. Using your list, play a game of 'Guess the Creature' in pairs. Without naming your creature, take turns reading your list of descriptions while your partner tries to guess your creature.

TEACHING NOTES



- 4. Choose one creature from the book and create a factsheet with the following information: scientific name, common name(s), Indigenous name(s), physical description, habitat, diet, life cycle, conservation status, interesting facts. Include a reference list of all sources used in your research.
- 5. Why are bees important? What are the differences between European honeybees and native Australian bees? What threats do bees face? What can we do to help bees? (Useful link: https://www.environment.sa.gov.au/goodliving/posts/2017/09/bees)

Visual art

- 1. Create a spread of your own for the book Backyard Bugs. This will include a short line on the lefthand page that describes an insect's action, and a drawing on the right-hand side that shows the insect. These can be hung up in the classroom in a class display of the students' work.
- 2. What is your favourite 'backyard bug'? Research its habitat, then create a drawing of the creature in its natural habitat.

Creative writing

1. Write a story on a bug of your choice. Make sure it is the main character of your story. What kind of personality does it have? What does it like to do? What adventures does it go on?





