

Teacher Notes

Themes

- Conservation
- Marsupials
- Endangered species

Key learning outcomes

- Understand some of the threats facing Australian native animals
- Learn about efforts made to save an endangered animal from extinction
- Identify some of the requirements for the Gilbert's Potoroo to thrive

Key curriculum areas

- **Science:** Science Understanding; Science as a Human Endeavour; Science Inquiry Skills
- **English:** Literacy, Language
- **Sustainability:** Conservation

Publication details

One Potoroo: A Story of Survival

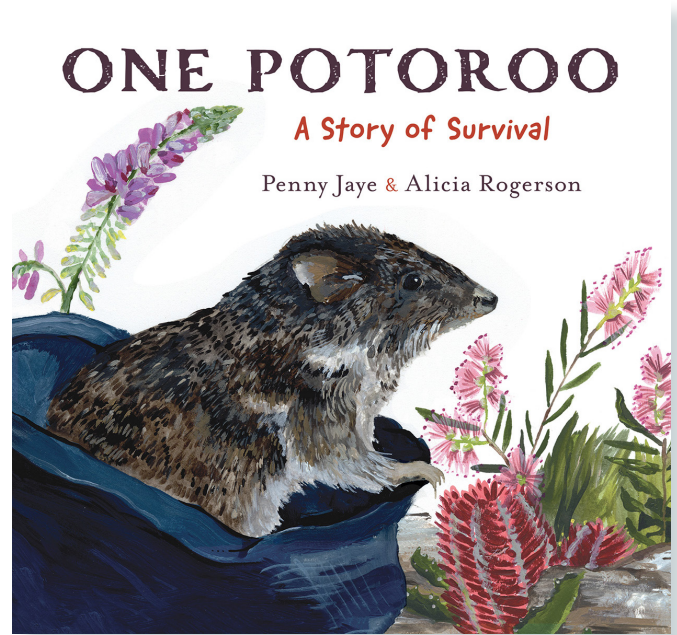
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One Potoroo

A Story of Survival

Penny Jaye and Alicia Rogerson

About the book

A conservation tale of the Gilbert's Potoroo – Australia's rarest mammal.

When a bushfire destroys Potoroo's home, he becomes one of the last surviving Gilbert's Potoroos at Two Peoples Bay in Western Australia. Frightened, hurt and alone, Potoroo needs a new home – somewhere safe from predators and with plenty of his favourite food. Luckily, a team of conservationists know where Potoroo can go to be safe.

One Potoroo: A Story of Survival is a beautifully illustrated book about the world's most endangered marsupial, the Gilbert's Potoroo, and the conservation work that has kept this unique Australian alive.

Recommended for
Readers aged 6–9



PUBLISHING

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About the author and illustrator

Penny Jaye is an award-winning author of books for children and older readers. From picture books to young adult fiction, Penny writes to find beauty, hope, strength and love in even the toughest situations.

Alicia Rogerson is an artist and illustrator who spends her days painting and dreaming. Her studio sits within the rural countryside on a hill beside a forest. Inspired by nature, objects and collections of things, her bold artworks spark the imagination and remind us of people or places we treasure.

Pre-reading questions or activities

Mammals are the group of warm-blooded animals with hair that give birth to live young. Marsupials, like Potoroo in the book, are a subset of mammals. Marsupials, unlike other mammals, have a pouch where the tiny, young babies go to suckle milk until they are a little bigger.

- Apart from the larger marsupials that many people know, like wombats, wallabies and koalas, can you name some other Australian marsupials?
Dunnart, quoll, bilby, quenda, bandicoot, Tasmanian devil, kaluta, antechinus, numbat, possum, bettong, quokka.
- You may have heard of the Tasmanian tiger, or thylacine. This is a marsupial that became extinct nearly 100 years ago. What does extinct mean and how might it happen?

Discussion questions

Science

1. Fires can occur on our continent at different times of the year. In this book, what starts the fire that destroys Potoroo's home? What are other conditions and events that might also contribute to fires igniting and spreading?

Lightning; sparks that escape from BBQs, machinery, cigarettes and power lines; embers from nearby fires; weather conditions such as high temperatures and big winds; drought; fuel-reduction burns.

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2. Many people have jobs where they look after different aspects of the environment, including animals, plants and natural systems (like rivers, deserts, the bush, the beach and grasslands). Can you think of the jobs and tasks that people might have done to help Potoroo?

Jobs: conservationist; wildlife carer; ecologist; researcher; zoologist; biologist; veterinarian; botanist; ranger; mycologist; data scientist; geographer; mathematician; cartographer; risk assessor; environment protection technician; nutritionist.

Tasks: monitoring; weighing; counting; thinking; collecting; researching; feeding; predator control; planning; recovery; collaborating; problem-solving; communicating; analysing.

English

1. Write down any words in the book that are unfamiliar to you and share your list with a partner. Between the two of you, can you figure out what the words on your two lists might mean? Using the book, can you find out what the local Indigenous name for the Gilbert's Potoroo is in south-west Western Australia?

Images and context might help students to guess meanings. Ngilkat is the Noongar name for the Gilbert's Potoroo.

Sustainability

1. Potoroo, like all animals, needs to have protection from certain threats and to have his life-giving needs fulfilled. What are his necessities? What might happen to Potoroo and his family if some of these necessities aren't met?

Absence of predators: pythons, foxes, cats.

Habitat: bush, scrub, rock homes, leaf litter; melaleuca thickets.

Food: truffles, seeds, berries, insects.

Potoroo numbers would fall, possibly to the point of extinction.

2. In the book, there is a picture of a truck carrying Potoroo to his new home. Think about the differences between the two habitats that the truck passes through. What do you think will happen to the burnt bush? How can we help protect these precious natural areas?

Burnt side lacks habitat, security, scrub, leaf litter, plants, fungi (and therefore truffles), melaleuca thickets. It contains smoky air and dried out soil. There may also be a lack of other potoroos for company and reproduction.

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Green side has plant and animal life but may also harbour predators. The point of moving Potoroo to the safe area for the interim is that he's fenced off from predators and it gives him a chance to survive and thrive before returning home.

The burnt bush should be able to regenerate itself, as long as more fires don't break out too soon. It can take a long time for natural bushland to regenerate but when it does, the potoroos can be returned to their original habitat at Two Peoples Bay.

If you visit a natural area, for example on a bushwalk, remember that it is home to many animals and plants, so leave the environment as you found it. Other examples of how to protect natural habitat include participating in citizen-science conservation projects and fundraising to support the conservationists who are working hard to protect native flora and fauna.

Activities

Science

Watching a video

In this [10-minute clip](#),* you will see a young Gilbert's Potoroo and her mother caught by scientists, measured and micro-chipped. Which parts of the clip relate to the book? Compare what you learned in the book with what you've seen in the video. There's a surprise, too!

**Alternatively, you can type 'Gilbert's potoroo microchipping' into a YouTube search, then select the video by the Gilbert's Potoroo Action Group. Or access via <https://www.potoroo.org/video-gallery>.*

Sustainability

What does Potoroo need?

Ask students to draw something that is vital for Potoroo's survival and continued existence. Students can think about preservation, protection, procreation, nourishment, habitat and food cycles. Once the drawings are done, students place them into piles of the same thing (granite slabs, leaf litter, truffles, water, a mate, fences, a place to dig, bushland). Are these piles relatively balanced? Are there too many drawings of food and not enough of protection, for instance?

As an extension activity, there could be a group or class discussion to decide which drawings could be combined to make posters so that other classes learn about the Gilbert's Potoroo. Humans have been very important to the revival of this marsupial, so students can think about the part that we play in this continued effort, too.

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English

What does it mean?

Using the following worksheet, match the word in the left-hand column (from the book) with the word or phrase in the right-hand column that has a similar meaning.

1	dusk	A	underground fungus
2	melaleuca	B	hunters
3	granite	C	twilight
4	quivering	D	soothed with ointment
5	foraging	E	carefully
6	predators	F	tea-tree
7	salved	G	scamper
8	scurry	H	a baby marsupial
9	truffle	I	a tough rock
10	joey	J	searching for food
11	gingerly	K	trembling

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Australian Curriculum Links

Year level	Learning area: Science	Other learning areas
Years 1/2	<p>Science Understanding: Biological Sciences</p> <ul style="list-style-type: none">Living things live in different places where their needs are met (ACSSU211) <p>Science Inquiry Skills: Communicating</p> <ul style="list-style-type: none">Represent and communicate observations and ideas in a variety of ways (ACSI029) <p>Science as a Human Endeavour: Use and influence of science</p> <ul style="list-style-type: none">People use science in their daily lives, including when caring for their environment and living things (ACSHE035)	<p>English: Literacy</p> <ul style="list-style-type: none">Discuss different texts on a similar topic, identifying similarities and differences between the texts (ACELY1665) <p>English: Literacy</p> <ul style="list-style-type: none">Engage in conversations and discussions, using active listening behaviours, showing interest, and contributing ideas, information and questions (ACELY1656)
Years 3/4	<p>Science as a Human Endeavour: Use and influence of science</p> <ul style="list-style-type: none">Science knowledge helps people to understand the effect of their actions (ACSHE051) <p>Science Understanding: Biological Sciences</p> <ul style="list-style-type: none">Living things depend on each other and the environment to survive (ACSSU073)	<p>English: Language</p> <ul style="list-style-type: none">Incorporate new vocabulary from a range of sources into students' own texts including vocabulary encountered in research (ACELA1498)
All	<p>Cross Curriculum Priority: Sustainability</p> <ul style="list-style-type: none">01.5 World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community actions for sustainability.01.9 Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.	

Related children's books from CSIRO Publishing

A Hollow Is a Home (<https://www.publish.csiro.au/book/7729>)

Bouncing Back: An Eastern Barred Bandicoot Story (<https://www.publish.csiro.au/book/7771>)

Hold On! Saving the Spotted Handfish (<https://www.publish.csiro.au/book/7903>)

The Great Lizard Trek (<https://www.publish.csiro.au/book/7807>)

Related information books from CSIRO Publishing

A Bat's End: The Christmas Island Pipistrelle and Extinction in Australia
(<https://www.publish.csiro.au/book/7791>)

Night Parrot: Australia's Most Elusive Bird (<https://www.publish.csiro.au/book/7356>)

Recovering Australian Threatened Species: A Book of Hope (<https://www.publish.csiro.au/book/7705>)

The Complete Guide to Finding the Mammals of Australia (<https://www.publish.csiro.au/book/6512>)

Other CSIRO resources

CSIRO has developed and delivered a broad range of high-quality STEM education programs and initiatives for nearly 40 years. Our programs aim to inspire the pursuit of further STEM education among students and the community, to equip the emerging workforce with tomorrow's skill sets, and to strengthen collaboration between industry and classrooms across Australia. For more information visit: <https://www.csiro.au/en/Education>