

Teacher Notes

Themes

- Mammalian reproduction
- Tasmanian devil ecology
- Developing independence

Key learning outcomes

- Understanding animal lifecycles.
- Constructing food webs.
- Awareness of environmental conservation.

Key curriculum areas

- **Science:** Science Understanding (Biological sciences, Earth and space sciences); Science Inquiry (Planning and conducting, Processing, modelling and analysing)
- **English:** Literature; Language
- **HASS:** Geography

Publication details

Purinina

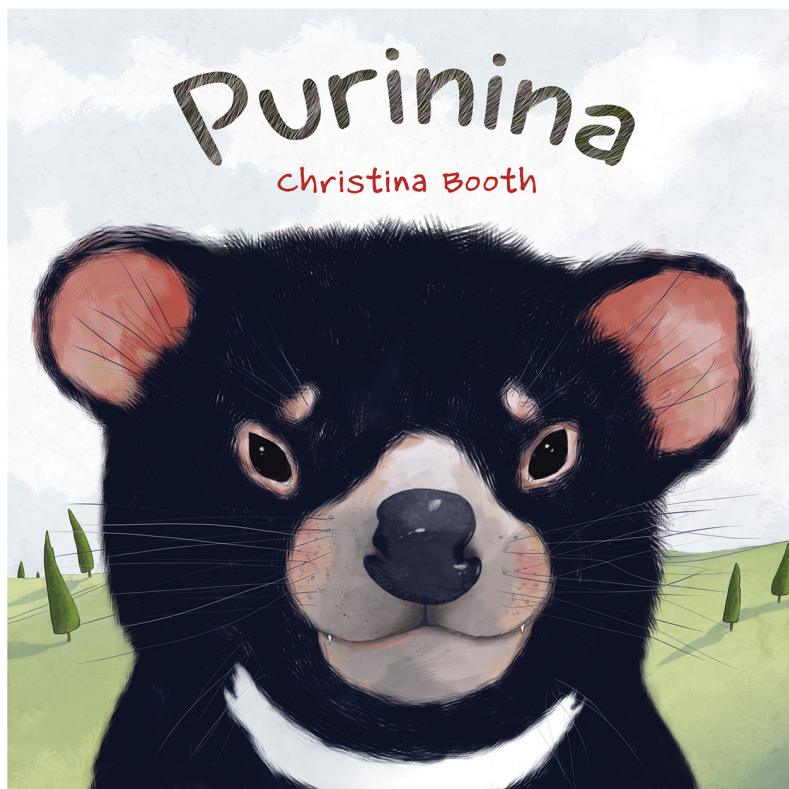
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Purinina

Christina Booth

About the book

Can Purinina survive without her mother?

Will she survive the challenges of the Tasmanian wilderness?

Follow the lives of the purinina (Tasmanian devils) and discover the issues facing this iconic species. With captivating illustrations and lyrical text, this new rendition brings the award-winning story of *Purinina: A Devil's Tale* to a new generation.

You can even learn how to speak 'purinina'!

Recommended for

Readers aged 5 to 9 (Years 1 to 4)



PUBLISHING

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About the author/illustrator

Christina Booth is a multi-award winning, internationally published author working from her studio in southern Tasmania. She grew up in the bush with wombats, quolls, wallabies, possums and, of course, purinina.

Pre-reading questions or activities

1. Ask the class if they have ever seen a Tasmanian devil before. Ask students to either describe or draw a Tasmanian devil from memory, and once complete, display some images for them to compare with their own description or drawing.
2. Pre-test some of the verbs in this book by seeing if students can impersonate any of them through either actions or sounds, for example: growls, wanders, lopes, yawns, screeches and stretches. There are many more to choose from!
3. With the class, watch the first minute of the video found here: <https://vimeo.com/671345544>. Then ask the class to discuss their feelings about Tasmanian devils. Discuss the use of dramatic music, screeching noises and even the title 'Terrors of Tasmania'. Do these influence how the students feel? Introduce that they are about to read a book about 'purinina', which is the name for Tasmanian devils from the language of Palawa/Tasmanian Aborigines. While reading, have them focus on feeling again.

After reading the book, have the students discuss whether their feelings were different to the video. You could then ask them which would be better, the video or the book, at encouraging people to care about purinina and gaining support for their conservation and survival.

Warning: Before showing the video, teachers and parents are advised to check that the video is age appropriate for your students/children.

Discussion questions

Science

1. How many examples of the purinina's basic needs can you find in this book?
Have the class listen to the book again and put up their hand when they hear an example describing a basic need (e.g. 'deep in the darkest corner of a warm, dry cave'). Make a list on the board. After going through the whole book, compare the list to our needs as people.

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2. The story takes place at different times of day, including daytime, sunset and night-time, and even features a full moon.

Open the book on a variety of pages, asking students where they think the sun is at this time. For example, when purinina are learning to 'growl, snarl, snort and SCREAM' against a background of sunset/sunrise colours, discuss what colours the students can see, what time of day this could be and therefore where the sun probably is.

3. Divide the students into groups of night and day. The class then has to look through the book and count how many pages are happening during the day (if they are in the 'day' group) or the night (if they are in the 'night' group).

On the board, write the answers from each group and compare them. It could be interesting to look for pages that are debateable (e.g. when the purinina are in the cave, but it is lighter outside).

After collecting the class's individual data, go through and decide together for each page and model the data collection. This could be done as a tally or simple dot plot graph.

English

1. Choose a page with a lot of noises on it, for example, when purinina are learning to 'growl, snarl, snort and SCREAM'. Ask the class what they think the purinina are trying to say to each other on this page. Choose some of the sounds and ask the class to see if they can make that noise. After a first attempt, ask them to do it again but using their faces to show their feelings, as well. Now have them add some gestures or body movement to create their best purinina language!

Ask them what would happen if they were to communicate in this way with their friends or other teachers. What would the other person think?

2. The book is full of some great onomatopoeias!

Start by explaining to the class what an onomatopoeia is (a word that imitates sounds). Read the book to the class, and instruct them to raise their hand when they hear an example of an onomatopoeia. Choose one of the students who raised their hand to do an impression of the sound.

Activities

Science

Food webs

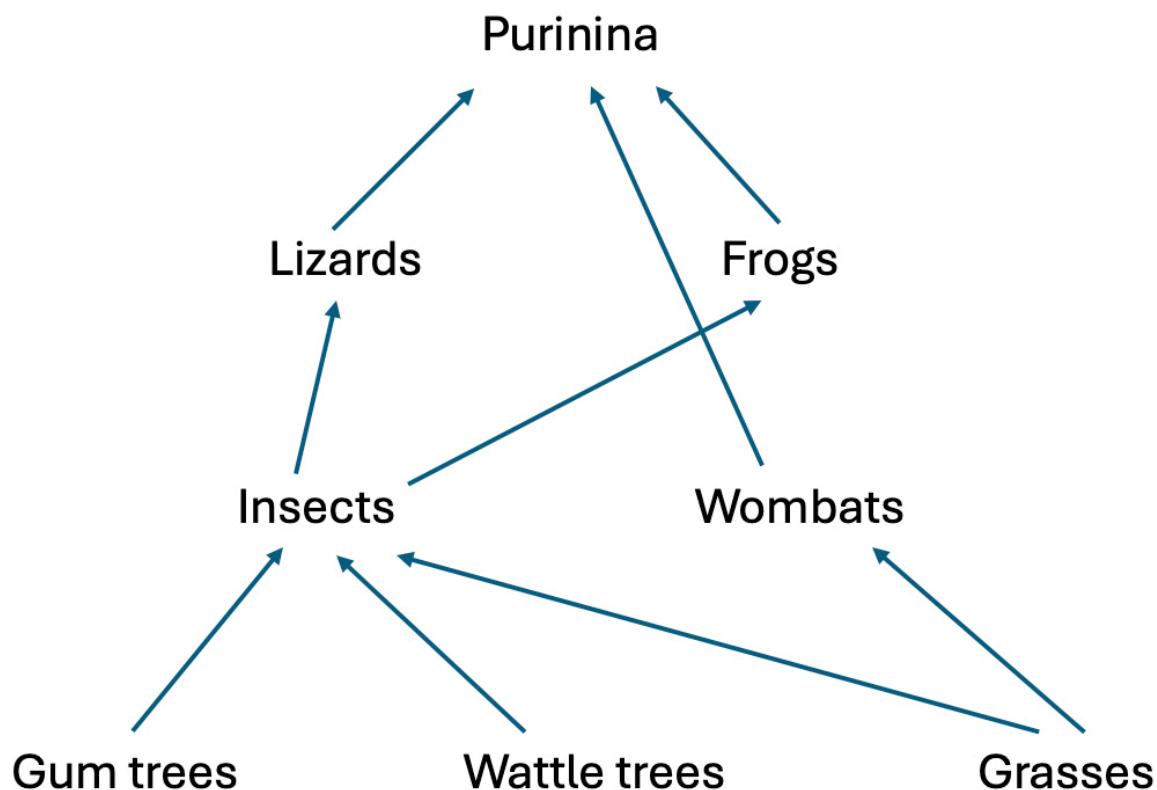
Ask the class if they can remember what purinina eat and write a list on the board.

Then look at the 'devil of a feast!' double-page spread. Compare the list to the foods mentioned on these pages and update the list if required.

Use this information to try and construct a food web with purinina as the top carnivore. If they have access to devices, have the class research what species of insects, lizards and wombats purinina might eat.

Once you have created a food web, identify the producers and consumers, and suggest what some decomposers might be (e.g. fungi, worms, bacteria).

An example food web could be:



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More food webs!

To find out more about purinina and other native Australian animals, Sydney Zoo has a great booklet 'WILD Kids: Food webs & Lifecycles'. This is designed for a pre-visit to the zoo, but there is a lot of excellent information related to the purinina in the booklet, as well as some ideas for further activities, such as building food webs. See: https://www.wildlifesydney.com.au/media/hdynk3pi/wildkids-wildkids-foodwebs-lifecycles_fa.pdf

Further resources are available at: <https://www.wildlifesydney.com.au/schools/resources/> (the booklet above is under Pre-school Resources).

English

Verb charades

Read a paragraph from the book and have students try to listen for and remember a verb.

Then choose a student to do an impression of that verb for the rest of the class to guess. (You could have the student whisper the verb to you to check they have selected appropriately if necessary.)

Once they have guessed, ask the class if anyone has a different verb, before moving on to a different paragraph.

One example paragraph is:

'In her mother's pouch, Purinina grows.
Her pink skin is now covered in black and white fur.
In the warm, red glow of the pouch,
Purinina squirms and turns, rolls and twists.'

Acting time!

To build on the discussion above on onomatopoeia, have students choose a page to act out. They can take it in turns to read the text and be the purinina making noises. Challenge the students to be the best purinina they can.

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HASS

Visit the purinina at your local zoo

Does your local zoo have any purinina? If so, why not try and arrange a visit? For example, Healesville Sanctuary in Victoria has an amazing breeding and reintroduction program, and the keepers there are happy to discuss their amazing and important work.

Here is some information from Healesville Sanctuary about their purinina:

<https://www.zoo.org.au/healesville/habitats/woodlands-track/tasmanian-devil/>

and

<https://www.zoo.org.au/healesville/whats-on/news/tasmanian-devil-triplets-boost-fighting-extinction-breeding-program/>

Sydney Zoo also has some great videos on their animals, and if you time it right, you might even be able to tune in to a live stream of their purinina:

<https://www.wildlifesydney.com.au/what-s-inside/virtual-zoo/live-streams/>

Tasmania Zoo also has a conservation program for purinina, see:

<https://tasmaniazoo.com.au/conservation/#devil>. When visiting the zoo, be sure to attend the keeper talk on the purinina!

Use these sites to lead a discussion on how the population of purinina could be an indicator of the health of other resources, such as forests, in Tasmania.

Teacher Notes

Australian Curriculum Links (Version 9.0)

Year level	Learning area: Science	Other learning areas
Years 1/2	<p>Science Understanding: Biological sciences</p> <ul style="list-style-type: none">Identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs (AC9S1U01) <p>Science Understanding: Earth and space sciences</p> <ul style="list-style-type: none">Recognise Earth is a planet in the solar system and identify patterns in the changing position of the sun, moon, planets and stars in the sky (AC9S2U01) <p>Science Inquiry: Planning and conducting</p> <ul style="list-style-type: none">Make and record observations, including informal measurements, using digital tools as appropriate (AC9S2I03) <p>Science Inquiry: Processing, modelling and analysing</p> <ul style="list-style-type: none">Sort and order data and information and represent patterns, including with provided tables and visual or physical models (AC9S2I04)	<p>English</p> <p>Language: Language for interacting with others</p> <ul style="list-style-type: none">Understand how language, facial expressions and gestures are used to interact with others when asking for and providing information, making offers, exclaiming, requesting and giving commands (AC9E1LA01)
Years 3/4	<p>Science Understanding: Biological sciences</p> <ul style="list-style-type: none">Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships (AC9S4U01)	<p>English</p> <p>Literature: Examining literature</p> <ul style="list-style-type: none">Discuss the effects of some literary devices used to enhance meaning and shape the reader's reaction, including rhythm and onomatopoeia in poetry and prose (AC9E3LE04) <p>Language: Language for expressing and developing ideas</p> <ul style="list-style-type: none">Understand how verbs represent different processes for doing, feeling, thinking, saying and relating (AC9E3LA07) <p>HASS</p> <p>Knowledge and Understanding: Geography</p> <ul style="list-style-type: none">The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent (AC9HS4K05)

Related books from CSIRO Publishing

For older readers:

- *Animal Eco-Warriors: Humans and Animals Working Together to Protect Our Planet* (<https://www.publish.csiro.au/book/7570>)
- *Poo, Spew and Other Gross Things Animals Do!* (<https://www.publish.csiro.au/book/8021>)
- *Sensational Australian Animals* (<https://www.publish.csiro.au/book/8094>)

For adults:

- *Saving the Tasmanian Devil: Recovery through Science-based Management* (<https://www.publish.csiro.au/book/7675>)

Teacher Notes

Double Helix magazine

Packed with fun, exciting and quality articles, Double Helix magazine is created to inspire young readers. It covers a range of topics across science, technology, engineering and maths.

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There is plenty of free content that can be used at school or home to support learning.

Double Helix Extra

Sign up to receive a fortnightly Double Helix email newsletter, including a quiz, brainteaser, news and a hands-on activity: <https://doublehelixshop.csiro.au/eNewsletter>

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>