Teacher Notes

Themes

- Extinct animals
- Australian environment
- Earth in prehistoric eras

Key learning outcomes

- Identify some of the animals that existed during the time of the last Ice Age.
- Understand some of the differences and similarities between the animals that existed then and the animals that exist now.
- Learn about what the Australian landscape would have been like during the last Ice Age.

Key curriculum areas

- **Science:** Science Understanding (Biological sciences, Earth and space sciences); Science Inquiry Skills (Planning and conducting, Communicating)
- **English:** Language; Literacy
- **The Arts:** Visual arts

Publication details

Diprotodon: A Megafauna Journey

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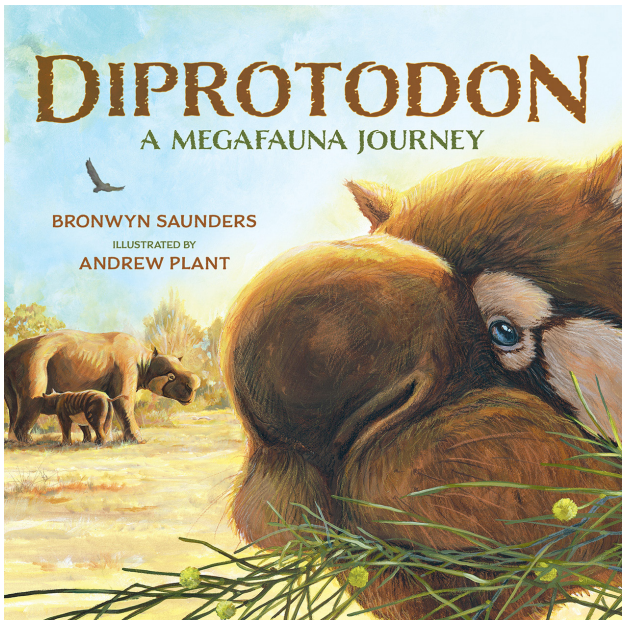


Diprotodon

A Megafauna Journey

Bronwyn Saunders and Andrew Plant

About the book

Follow in the giant footsteps of Diprotodon, as he finds his own place in the world. Explore his Ice Age environment, encounters with other megafauna and the challenges he faces to survive.

Diprotodon: A Megafauna Journey features the largest marsupial that ever lived. Brought to life through fabulous illustrations, this story will captivate and enthral readers.

Recommended for

Readers aged 6 to 9 (Years 1 to 4)

Teacher Notes

About the author and illustrator

Bronwyn Saunders is a passionate citizen scientist who delights in sharing facts about Australia's natural history with readers.

Andrew Plant is a Melbourne-based illustrator, author and science educator. He loves creating books about almost any subject, and is passionate about sharing that creativity with kids.

Pre-reading questions or activities

Ice Age

Before reading the book, talk to the students about the last Ice Age. How long ago was it? What do students think about when they think of the term 'Ice Age'? What might Australia have been like at that time? What might other parts of the world have been like? What would have been different about the landscape compared with what it looks like now?

Extinction

Ask students what extinction means. Can they think of any other animals that are now extinct? What kinds of animals would have found it too difficult to survive the change that came with the end of the Ice Age?

Discussion questions

Science

1. The book *Diprotodon* describes an animal that existed during the last Ice Age. What things about the diprotodon remind students of animals that exist today? What things are different?
2. Some plants are mentioned in the book. Do you recognise any that exist today?
3. The diprotodon was a marsupial. What marsupials can students identify? What do they know about marsupials? Make a list on the whiteboard.
4. Discuss whether any of the animals that existed during the Ice Age might still exist today. Can they recognise any animals from the book that exist today? Why might these animals have been able to survive?

Teacher Notes

English

1. What does the word ‘megafauna’ mean?
2. Talk about some of the words in the book that might not be familiar to students, but which don’t appear in the glossary. As a class, discuss what they mean; does reading the whole sentence help? Examples include the following:
   - retreated
   - trampled
   - scours
   - vulnerable
   - flightless
   - plods

The Arts

1. We don’t know exactly what diprotodons looked like. How do you think scientists work out what animals that no longer exist looked like? What do you think they use to guide them?

Activities

Science

Research project 1

Research another animal that existed in Australia during the Pleistocene era’s Ice Age. Choose one of the other animals that appears in the story (see the list of other species at the end of the glossary) and find out as much of the following as possible:

- what it looked like
- where it lived
- how it lived
- what it ate
- which predators may have hunted it, or if it was a predator, what animals it hunted
- whether it was related to any animal that exists now.

Make a poster outlining all of the facts you have learnt.

Research project 2

Research the Pleistocene era, during the time of the most recent Ice Age, from an environmental perspective.

Find out what the world was like during this era; include temperature, ice coverage, animals, etc. What was the average temperature in the Southern Hemisphere? The Northern Hemisphere? Which parts of the world were colder? Which parts of the world were covered by ice? What animals existed then? Write an illustrated report.

English

New megafauna, part 1

Have the students make up a new animal that might have existed at the time of the diprotodon. Write a story about that animal, and how it might have interacted with the diprotodon.

Time travel

Imagine you are an explorer who is able to go back in time. Write a journal entry about your experience travelling back to the time of the Ice Age in Australia. Include the animals you see, what happens and what the landscape looks like.

Diprotodon crossword

Complete the crossword on the following page.

Answers

Across:

3. Diprotodon
5. Plants
7. Emu
8. Milk

Down:

1. Herd
2. Mountains
4. Ice Age
6. Tusks

The Arts

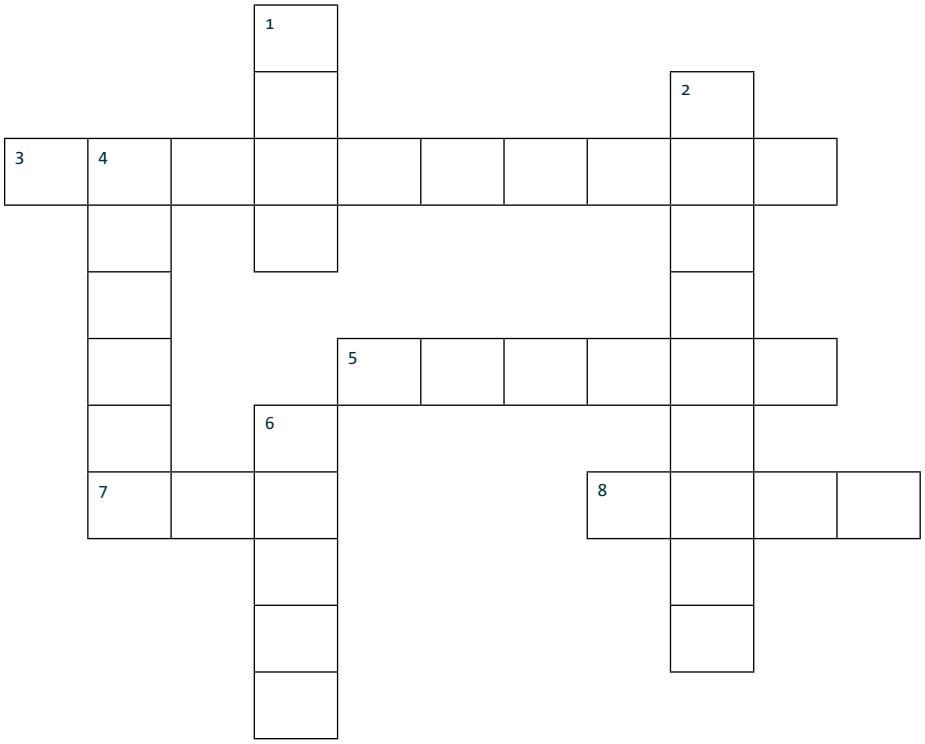
New megafauna, part 2

Take the new animal that students came up with in the English activity above (*New megafauna, part 1*). Draw or paint what that animal might have looked like, and draw it in the environment in which it lived.

Worksheet

Diprotodon crossword

Read the clues and complete the crossword. Use the book *Diprotodon: A Megafauna Journey* to help you.



Across:

3. What is the name of the animal this book is about?
5. What does Diprotodon eat?
7. An animal in the book that still exists today.
8. What did Diprotodon drink when he was a baby?

Down:

1. What was a group of diprotodons called?
2. Where were the rainforest trees found during the Ice Age?
4. What period was Earth in at that time?
6. Diprotodon had two of these in his lower jaw.

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Australian Curriculum Links (Version 8.4)

Year level	Learning area: Science	Other learning areas
Year 1	**Science Understanding: Biological sciences** • Living things have a variety of external features (ACSSU017) • Living things live in different places where their needs are met (ACSSU211) • Observable changes occur in the sky and landscape (ACSSU019)	**English: Literacy** • Create short imaginative and informative texts that show emerging use of appropriate text structure, sentence-level grammar, word choice, spelling, punctuation and appropriate multimodal elements, for example illustrations and diagrams (ACELY1661) **Visual Arts** • Create and display artworks to communicate ideas to an audience (ACAVAM108)
Year 2	**Science Understanding: Biological sciences** • Living things grow, change and have offspring similar to themselves (ACSSU030) **Science Inquiry Skills: Planning and conducting** • Participate in guided investigations to explore and answer questions (ACSIS038)	**English: Literacy** • Read less predictable texts with phrasing and fluency by combining contextual, semantic, grammatical and phonic knowledge using text processing strategies, for example monitoring meaning, predicting, rereading and self-correcting (ACELY1669) • Write legibly and with growing fluency using unjoined upper case and lower case letters (ACELY1673) • Create short imaginative, informative and persuasive texts using growing knowledge of text structures and language features for familiar and some less familiar audiences, selecting print and multimodal elements appropriate to the audience and purpose (ACELY1671) **Visual Arts** • Create and display artworks to communicate ideas to an audience (ACAVAM108)
Year 3	**Science Understanding: Biological sciences** • Living things can be grouped on the basis of observable features and can be distinguished from non-living things (ACSSU044) **Science Inquiry Skills: Communicating** • Represent and communicate observations, ideas and findings using formal and informal representations (ACSIS060)	**English: Literacy** • Listen to and contribute to conversations and discussions to share information and ideas and negotiate in collaborative situations (ACELY1676) • Plan, draft and publish imaginative, informative and persuasive texts demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose (ACELY1682) • Re-read and edit texts for meaning, appropriate structure, grammatical choices and punctuation (ACELY1683) • Write using joined letters that are clearly formed and consistent in size (ACELY1684)
Year 4	**Science Understanding: Biological sciences** • Living things depend on each other and the environment to survive (ACSSU073) **Science Understanding: Earth and space sciences** • Earth's surface changes over time as a result of natural processes and human activity (ACSSU075) **Science Inquiry Skills: Communicating** • Represent and communicate observations, ideas and findings using formal and informal representations (ACSIS071)	**English: Language** • Incorporate new vocabulary from a range of sources into students' own texts including vocabulary encountered in research (ACELA1498) **English: Literacy** • Plan, rehearse and deliver presentations incorporating learned content and taking into account the particular purposes and audiences (ACELY1689) • Plan, draft and publish imaginative, informative and persuasive texts containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features (ACELY1694) • Re-read and edit for meaning by adding, deleting or moving words or word groups to improve content and structure (ACELY1695) • Write using clearly-formed joined letters, and develop increased fluency and automaticity (ACELY1696)

Related books from CSIRO Publishing

For younger readers:

- *AmAZed! CSIRO's A to Z of Biodiversity* (https://www.publish.csiro.au/book/7984)
- *Dinosaur Questions & Answers!* (https://www.publish.csiro.au/book/8034)

For older readers:

- *Rocks, Fossils and Formations: Discoveries Through Time* (https://www.publish.csiro.au/book/7864)

For adults:

- *Prehistoric Australasia: Visions of Evolution and Extinction* (https://www.publish.csiro.au/book/6994)

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