

TEACHERS' NOTES

ICEBERG

By Claire Saxby, Illustrated by Jess Racklyeft

RECOMMENDED FOR: Ages 5-8 years old **LOWER to MIDDLE PRIMARY**

THEMES: Antarctica, icebergs, sea life, southern ocean, climate change

CURRICULUM LEARNING AREAS:

- English: Literature, literacy and language
- Visual literacy
- Humanities and Social Sciences
- Cross-curriculum priority: Sustainability

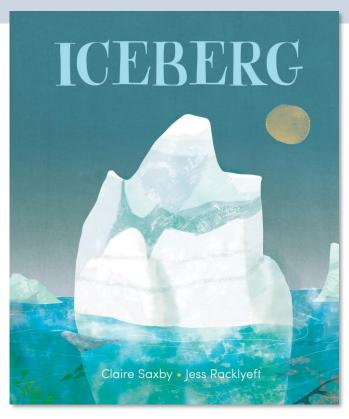
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INTRODUCTION

"This world is not empty, nor ever still. Far from places we know, it feels everything we do." Claire Saxby

This picture book is quite simply a visual and literary masterpiece. Its opening spread features spectacular spikes of colour, dramatic expanses and subtle details, including the shadow of an orca, the peek of a seal, and the track of penguins.

Turn the pages and the colours lighten slowly to reveal more of the iceberg until the sun fully reveals itself and the wildlife on and around the iceberg. The tone of the language playfully reflects this change. And soon we are below the water's surface with a magnificent gatefold opening out to reveal the extraordinary panorama of activity under the sea.

Antarctica is remote, forbidding, hostile and uninhabited by humans, yet this frozen continent is key to understanding how our world works, and our corresponding impact on Earth's climate and ocean systems. Claire Saxby's lyrical narrative combined with Jess Racklyeft's detailed illustrations are sure to spark curiosity for Antarctica and its flora and fauna. As well as being an important natural laboratory, Antarctica provides the opportunity to educate children on the importance of protecting this fragile continent and its ecosystems.

These teachers' notes have been formulated with Year 3 Australian Curriculum in mind, but the activities and resources shared here could easily be adapted to suit younger and older students alike.

STORY SUMMARY

In the final freeze of an Antarctic winter, green tails wave across a star-full sky, as if to farewell endless nights. If this world looks empty, look closer . . . Penguins trek across the ice to their winter homes. As the temperature warms, birds fly above on their long migrations. And with the advent of summer, beneath an iceberg, the sea is teeming with life. Ocean, sky, snow and nature interact in a delicate dance in this evocative portrayal of the life cycle of an iceberg.

Q&A WITH THE AUTHOR, CLAIRE SAXBY

1. What is the essence of Iceberg?

Wonder. Antarctica appears to us mostly as an expanse of snow and ice and the occasional penguin, but it has a rich and complex ecosystem with connections across the globe both under and above the water. This story encourages young readers to look closely and marvel at this world. It is also a reminder of the fragility of that ecosystem, and the impacts of global warming on this beautiful place.

2. What are the outstanding points and features of the book?

An introduction to Antarctica and the many animals (and plants) that may be encountered there, viewed through the lens of an iceberg moving from 'birth' to 'death'. Also food chains, life cycles, seasons, animal migrations, the value of looking more closely at things you think you know, the language of a place and poetry.

3. What inspired you to write this book?

I came to this book slowly, ultimately via Antarctic words. When my son was in primary school, he

came home with a project about Antarctic food chains. He'd had some days home sick and although better, wasn't quite ready to return to the classroom. So, we went to the library and brought home some relevant books. While he was gathering his information, I was captivated by the words that related to icebergs, and the formation and melting of ice in Antarctica. Words like 'calving', 'cheeky growlers', 'grandfather blues' and more. I became interested in the passing seasons and their effect on the iceberg. I learned about krill that defy ageing, actually regressing to more juvenile forms to survive winter, and algae that survives while bound up in ice only to multiply as summer nears. Fascinating.

4. Who do you feel this book is written for? Who would most benefit from reading it?

Primary children would benefit from learning about ocean and environmental themes. Older children in upper primary could look more closely at the language and poetry. All year levels can benefit from learning more about climate change and global warming.



Q&A WITH THE ILLUSTRATOR, JESS RACKLYEFT

I. What are the major themes that come through in this book?

Ultimately it is the life cycle of an iceberg – from calving to sinking back into the ocean, in the beautiful and mystical environment of Antarctica.

2. What are your favourite features of the book?

The text is lyrical and visual, while also science-based – sharing the world of Antarctica through the seasons, from the dark winters to the 24 hours of light in summer. The reader is transported to this unique world through the text and images, watching the movements of animals and light, as well as the iceberg itself – the main character as such.

3. Tell us how you came to create the rich pallete used for Iceberg?

I was aware that the book would be very blue

and white with an ocean and iceberg environment, so to bring richness and depth to the imagery, I decided collage with delicate prints and scanned textures would be the best way to reflect the tiny details in the icebergs and ocean. I am quite used to basing books around animal or human lead characters - but this was all about an iceberg! So I had to hold myself back from filling the pages with ocean animals, and save this for the big middle spread. The lead character was given the name 'Norman' by the editor and I, so our iceberg Norman became the hero of each spread and is usually whiter and crisper than the other ice forms. Through the book 'he' moves from the left to the right side, while the ocean horizon line moves to reflect the season from filling the page in winter, to more sky in summer. At the same time, the sun moves from just tapping the horizon to being at the top of the spread.

CLASSROOM DISCUSSION AND ACTIVITIES

BEFORE READING ICEBERG

- Begin by asking students what words come to mind when they think about icebergs. Write these words on the white board to refer to later. Here are some potential prompts (allow students time to study the front cover image and find the seal and fish under the water. Then turn the book over so students can see the back cover illustrations of birds, the penguin and whale.):
 - What is an iceberg?
 - How do icebergs form?
 - Where do you need to go to see icebergs?
 - Can anything live on an iceberg?
 - What animals might you find living on an iceberg?
- Ask students to name any specific animals or fish they believe live on or around icebergs. Again, list these to refer to later.
- Ask students if they know where icebergs can be found in the world. This will give you a sense of their preexisting knowledge, if any, of Antarctica.
- Open the book to the title page and point out to students that the majority of an iceberg's mass is under
 water and that this is why we have a phrase 'only the tip of the iceberg', meaning something that is only
 partially seen or known. Also point out the cute little creature sitting at the bottom of the opposite page and
 ask students if they can name it. [Answer: it's a leopard seal]



ENGLISH

Have a large whiteboard handy and separate this into two halves using a line down the middle.

- Read *Iceberg* aloud to students, asking them to tune in by keeping track of how many animals, birds, fish and mammals they identify or learn about while listening.
- Ask students to share with the class the names of these animals and write them on a whiteboard to refer to later.
- Now ask students to participate in a second read through, by raising their hand to signify a word they are unfamiliar with. When a student raises their hand, ask them to share which word they are unfamiliar with and write it on the board.
- Separate students into pairs and ask them to look up the words recorded on the board in a dictionary, write down its definition and then find a way to use each word in a sentence. Students may then take turns sharing with the class one word per pair, the definition and the sentence they wrote using this word.
- Referring to the list of animals on the board generated while tuning in, ask students to choose a single animal, bird, fish or mammal and write a short piece about how that animal, fish, bird or mammal might feel about the iceberg. Ask students to consider the following questions:
 - What might that animal, fish, bird or mammal love the most about the iceberg?
 - What might it like to eat?
 - Which other animals, birds, fish or mammals might it like to be 'friends' with?
 - How might that animal, bird, fish or mammal feel if there was no longer an iceberg?
 - What does that animal, fish, bird or mammal want us to know about protecting Antarctica?

Hot and Cold words:

Explain to students that certain words can be used to create atmosphere in a story. For instance, some words can make us feel colder or warmer than others. Ask students to listen to a read aloud of *Iceberg* and call out COLD or HOT when they hear a word that makes them feel this way. For example, 'sparkle-frost' might feel cold, 'volcanoes' might feel hot. Ask students to work in groups or pairs to write down 25 hot or cold words in 5 minutes.

- Ask students to write a poem of their own, based on *Iceberg*. Ask students to consider the following questions while writing their poems:
 - Why do they think icebergs are important to the world?
 - How would they feel if the animals, birds, fish and mammals lost their homes or their lives if the iceberg melted away at the wrong time?
 - What can they do to help save this environment?
 - What do they wish everybody knew about the Antarctic ecosystems?
 - Ask students to use as many hot and cold words as they can in their poem.
- Ask students to choose one of the animals, birds, fish or mammals illustrated in *Iceberg*. Students can then
 write a 5-day diary from their chosen character's point of view. Diary entries can have an imposed word limit
 of 100 words per entry if you wish.
- Explain to students that just as illustrators use an array of techniques to communicate ideas, so too do writers. In *Iceberg*, Claire Saxby uses very poetic language to tell us a lot about icebergs in only a few words. The techniques she uses include repetition, rhythmic changes in sentence length, as well as word choice.
 - Repetition: point out that repetition allows a writer to put emphasis on things they think are significant in a text. Now point out examples of repetition in the text such as, 'If this world looks empty, look closer.' and 'Visitors depart: to the deep; to warmer islands; to tropical birthing waters; to faraway summers.' and ask students why they think the author chose these spots in the text to emphasise. Ask them to find other examples of repetition in the text.



- **Rhythm** and sentence length: explain that changing the number of words in a sentence changes the way a text is read, the tone and mood. Ask students if they can see a pattern form with the number of words in sentences on dark wintry pages compared with the sunny, summery pages, and why that might be?
- Word choice: explain that some words appeal to our senses more than others. Use as an example from the text, 'Leopard seals <u>lurk</u> as a raft of penguins <u>explode</u> like black and white <u>rockets</u> from an ice hole.' and ask students how the underlined words here increase the drama of what is being described. To illustrate your point, replace the underlined words with less interesting alternatives: 'lurk' changes to 'hide', 'explode' to 'jump out', and 'rockets' to 'birds'. Now ask students which version they prefer and why?

ASSESSMENT

- Ask students to create a zine containing all the important information one might need to know about Antarctica, which animals, birds, fish and mammals live there and why it is important to protect it. Students should also include a resource list of various helpful organisations and resources available on the internet.
- Build a diorama of an iceberg and its surrounding environment, being sure to include all animals, fish, birds and mammals illustrated in the picture book *Iceberg*.
- Look at Antarctica and its icebergs from a factual perspective and present your findings to the class as an oral presentation with supporting images presented in a 3-minute PowerPoint presentation.
- Produce a detailed report on an invention that you believe might help save the fragile ecosystems in Antarctica. Students should be as imaginative as possible, with no idea being considered too silly or far-fetched. What does it do? How could it be useful to the ecosystems or inhabitants of Antarctica? Provide diagrams and specifications for your prototype.

VISUAL LITERACY

- The book's illustrator uses visual techniques to convey a sense of time passing and the eternal cycle of icebergs
 forming and disappearing. These techniques are very subtle but once you know what to look for are easy to
 spot. They include changes in colour, shifts in the horizontal axis and positioning of the sun and iceberg on the
 page, as well as changes in perspective and the number of elements on each page. Look closely at each
 technique and discuss.
 - Colour: encourage students to think about the power of colour to communicate. In a quick classroom
 discussion, ask what colours they think of when they think of winter and summer? Now encourage them
 to look at each double-page spread and observe the colours used and how they change as the season
 changes.
 - Horizontal Axis: return to the beginning of the book and have students look closely at the horizon and how it moves downwards and back upwards as the story progresses. Point out that more of the sky is visible as summer approaches, with the reverse as winter nears. Positioning have students trace the trajectory of the sun upwards and downwards, as well as the iceberg moving left to right across the page. Note how both the sun and iceberg sit right in the centre of the last page.
 - Perspective: as well as moving left to right across the page, the iceberg moves from a long shot to
 close-up as summer approaches and recedes again with the coming of winter. Also, the impact of the
 gatefold pages in the centre is greatly intensified when our perspective changes from above water to
 below.
 - Elements: ask students if they can spot changes in the number of creatures they can see as the weather changes. Ideally, you want them to see that the pages featuring warm weather are bustling with activity compared to the colder, wintry pages. [NB, notice the ship moving towards the iceberg in summer and moving away in winter, too.]



HUMANITIES AND SOCIAL SCIENCES

- Ask students to visit the Australian Antarctic Program Website. On their Antarctic Animals page students need to choose which animal, bird, fish, mammal or organism they might like to research. Students are then to create a presentation on their chosen subject, sharing important information about their subject such as habitat, life cycle, position in food chain, breeding cycles, migration cycle and its relevance in the Antarctic ecosystem. Students should also list dangers to the health of their chosen subject and preservation ideas. This can be a poster, a written journal, a Prezi, Keynote, PowerPoint or short film.
- Who Lives In Antarctica? There are many people who live in Antarctica, conducting important work studying the ecosystems, animals, birds, fish and mammals. Ask students to watch this video:
 https://www.antarctica.gov.au/galleries/video/page4 and discuss what it might be like to live and work in such a remote and hostile environment. Students should then research, in pairs or groups, using this website:
 https://www.antarctica.gov.au/about-us/ exactly what jobs are available on Antarctica and why they are so important:
 - Which job might they choose if they could?
 - Why would they choose this job?
 - What do they think might be involved in preparing for doing their chosen job?

Students can share this work as a poster, a written journal, a Prezi, Keynote, PowerPoint or short film.

- Antarctic Soundscape: Consider the sounds of Antarctica how many sounds can students imagine or isolate (they can use the illustrations in *Iceberg* as a prompt)? These could include the birth of an iceberg, the slapping of penguins on ice, the sound of the wind, the sound a penguin makes, the arrival of migrating birds, the sounds of the colony and breaching whales. What else can students think of? View and listen to <u>Sounds of Antarctica</u> and <u>Antarctic Sights and Sounds</u> on YouTube for some more ideas.
- Travel Agency: Ask students to design a promotional campaign to attract tourists to visit Antarctica. It is vital that students have an environmentally safe plan for their visitors and that they have information to share with visitors about the importance of respecting this fragile ecosystem.
 - What do they need their travellers to know and understand?
 - How long should travellers stay?
 - How will they travel there?
 - Where will they stay?
 - What will they see?
 - What will they eat?

Students will find this website helpful for research: https://www.lonelyplanet.com/antarctica

SUSTAINABILITY

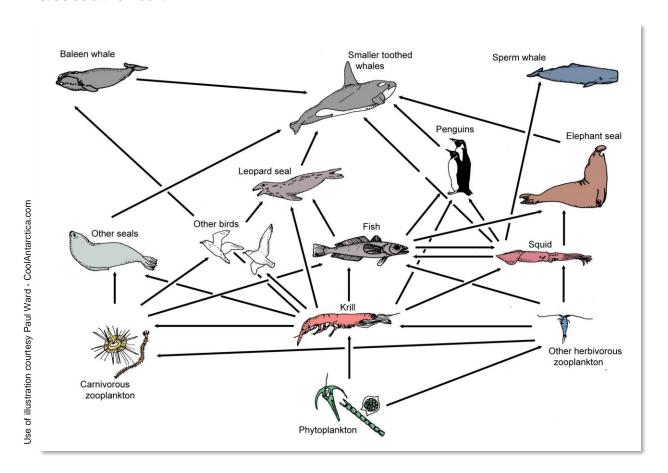
- Ask students to investigate how the animals and plants in Antarctica survive such harsh conditions and climates.
- **Climate change:** Read the last page out to the class. Now close the book and in a whole class discussion ask students what they understand climate change to be?

Next, ask them how warming oceans might affect an iceberg's size. If they struggle to answer, ask them what happens when you put an ice cube in a warm glass of water? Then ask how melting icebergs might affect the fish, crustaceans, birds and animals we have seen living on, under or above an iceberg?

Finally, point out that the interconnectedness previously discussed means that if one thing changes, the system will be affected. Return to the image of interconnectedness and explain that krill can't live in warmer water and ask them what the impact will be on the fish, squid, birds and seals that rely on krill to survive (and, in turn, the creatures who rely on fish, squid, birds and seals to survive). [NB: older students could be engaged in a conversation about rising sea levels]



Read through the book once slowly and point out each of the creatures as you come to them in the story. At
the end explain that lots of these creatures rely on the iceberg and each other to live (and die). Show your
students the following food chain illustration, pointing out that each level in the illustration depends on the
levels below for food.



AUTHOR AND ILLUSTRATOR BACKGROUND

ABOUT THE AUTHOR

Claire Saxby was born in Melbourne, moved to Newcastle as a toddler and to Bougainville Island in PNG when she was ten. She attended many schools around Australia before studying in Melbourne to become a podiatrist. For several years Claire worked in community health while simultaneously writing for children. Her books fall into three main categories: animals and the worlds they live in, history, and humour. Claire's work has won several awards including CBCA Honour Book, an NSW Premier's Literary Award, a SCBWI Crystal Kite Award, an Environment Award for Children's Literature, an Educational Publishing Award and the Whitley Award multiple times. She is widely curious about just about everything and passionate about encouraging curiosity and wonder. Claire works part-time in a bookshop.

ABOUT THE ILLUSTRATOR

Jess Racklyeft creates a variety of illustrated things – picture books, paintings, prints, pins and cards – mainly in watercolours. She works from her Melbourne home studio with her cat and dog at her feet, and occasionally one of her kids joins in too. Her work often combines collage – either on paper or digitally assembled – and lots of ink, and for every book she tries to use a new technique or process to continue to challenge and grow, book by book. Jess worked in publishing sales for almost a decade before making the leap to full-time illustration work, and since then has won several illustration accolades including two CBCA Notable Picture Book of the Year awards. Her work can now be found in bookshops and libraries across Australia and her days are happily spent in a messy studio or visiting local storytimes with her two young kids. More of her work can be found at www.jessesmess.com



ADDITIONAL RESOURCES

<u>GetSmart Antarctica</u> This website contains links to webquests, worksheets, information on plants and animals, interactive activities, images, cool clips, literature, apps, YouTube videos games and links to related content.

<u>Australian Antarctic Program Education Resources</u> Here you will find a comprehensive list of resources for all areas of the curriculum

<u>Classroom Antarctica</u> is an online teaching resource produced by the <u>Australian Antarctic Division</u>, with lesson plans aimed at grades 3 to 8.

CORRESPONDING LITERATURE

This Antarctic reading list of books has been selected for general interest reading:

Antarctica: The Unfolding Story by M Andrew

After the last dog died: The true-life, hair-raising adventure of Douglas Mawson and his 1911-1913 Antarctic Expedition by C Bredeson

Australia, Oceania and Antarctica by K Darian-Smith

Penguin by A Dekker, M Isham, and S Isham

Antarctic Dad by H Edwards and K Burgemeestre

Journey to Antarctica by J Haydon

Sophie Scott Goes South by A Lester

One Small Island by A Lester and C Tulloch

Antarctic Whales (also Antarctic Penguins and Antarctic Flying Sea Birds) by A and C Parker

Polar Eyes: A Journey to Antarctica by T Patrick and N Hutcheson

Douglas Mawson by B Riffenburgh

Sydney of the Antarctic (also Antarctica: The Heart of the World and Antarctica: The Last Great Wilderness) by C Tulloch

ABOUT THE WRITER OF THE NOTES

Tye Cattanach has long been involved in children's books in Australia. Her career began as a book blogger and specialist children's bookseller nearly 20 years ago. Since then, she has been a P-12 Library Coordinator, starting the Manor Lakes P-12 Library from scratch, and marketing and publicity manager for Penguin, where she was responsible for the planning and implementation of the award-winning Penguin Teachers' Academy App. Tye has travelled widely, presenting on the importance of reader/audience engagement and library culture and the importance of engaging reluctant readers. Tye worked on several high-profile author campaigns before leaving Hardie Grant to join the team at Readings, working as part of the events team and in Readings Kids. Tye is a freelance education consultant for various organisations.

