

Teacher Notes

Themes

- Biodiversity
- Behavioural and physiological adaptations
- Bird identification

Key learning outcomes

- Identify different adaptations birds have for survival
- Compare bird appearances and behaviours
- Describe how different habitats meet the needs of different birds
- Classify Australian birds based on their different features
- Learn to discover birds in our urban spaces

Key curriculum areas

- **Science:** Science Understanding (Biological sciences); Science Inquiry
- **English:** Language; Literature; Literacy
- **HASS:** Geography
- **The Arts:** Visual Arts

Publication details

This Bird: Noticing Our Urban Birds

ISBN: 9781486318452

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This Bird: Noticing Our Urban Birds

Astred Hicks with Holly Parsons

About the book

Discover the birds that share our urban spaces.

What's so fancy about *this* bird? What's so clever about *that* bird? Perhaps it's a weightlifter, a marathon flier, an artist, or even a liar.

You don't need to go far to see intriguing birds, even in the city. From colourful parrots to artistic bowerbirds and fancy fairy-wrens, there's lots to notice in our local backyards, streets and parks.

Written by Astred Hicks in collaboration with bird scientist Dr Holly Parsons, and featuring Astred's distinctive and engaging illustrations, *This Bird* features fun facts about some remarkable Australian native birds and hints on where (and how) to find them!

Recommended for

Readers aged 6 to 12 (Years 1 to 6)



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About the authors

Astred Hicks is a best-selling illustrator, highly awarded book designer, emerging author and complete bird nerd. She is excited about noticing the world around her and hopes to inspire others to do the same. She is also the illustrator of *A Hollow Is a Home*, *Ocean Animals* and *Swiftly*.

Dr **Holly Parsons** is a bird-loving scientist who spends her days studying the amazing Australian bird life that lives in our towns and cities, and sharing her passion with everyone she meets.

Pre-reading questions or activities

What have you noticed?

What birds have you seen around your home or around your school? What do they look like?

Do you see different birds when you go on holidays or when you visit the beach or the park? Why do you think that is?

Special features

Can you think of a bird with a unique beak or feathers? Why do you think they have these different features?

Discussion questions

Science

1. There are so many different shapes, colours and sizes of Australian birds in this incredible book. Can you identify some of the features that help these birds find food, move about and stay safe?
2. *'Oooooo ... doo-doo-doo-whipp!'*
'Pew pew.'
'Boo-book.'
'Che-weep, chewip, chewip, chew-will, che-will.'

These are only a few of the bird calls that the authors chose to include in their book about birds. How is this helpful for readers who are learning to identify birds?

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3. The beautiful birds in the book occupied many different habitats around Australia. Did you notice the unique ways that some of the birds interacted with or benefitted from their environment? Why do you think birds are able to live in so many different environments?
4. What do you think was the strangest-looking bird from this book? Why do you think some animals have to evolve such extreme features?
5. The book features beaks that come in all kinds of shapes, sizes and colours. How do you think the size and shape of a beak helps different birds?
6. How might changes to the environment – such as climate change, bushfires and habitat loss – affect different birds? Which birds do you think will be best suited to adapt and survive?
7. Thinking about everything we have learnt about behavioural and physiological adaptations from this book, how might Australian birds change and evolve over time as the environment around them continues to alter due to natural causes and human impact?
8. After looking at all of these wonderful Australian birds, I bet you're excited to do some birdwatching of your own! If you wanted to keep track of the different birds you spot, how might you collect and organise your data? What features from this book could help you with bird identification and recording your observations?
9. How many nocturnal birds can you find in this book? What do you notice about the appearance of nocturnal birds compared to diurnal birds?

English

1. Throughout the book we learn that there are many bird names that describe the physical and behavioural traits of the bird, such as the *powerful owl*, *eastern whipbird*, *purple swamphen* and *red-browed finch*. What is your opinion of naming birds in this way, as compared to other bird names, for example the *bush stone-curlew*?
2. There are many other examples of bird names in the book. Some birds are named after places or people, some are named after European birds, and some take their name from different Indigenous languages. Can you choose a bird from the book and work together as a class to uncover the origin of its name?
3. '*On a moonlit, balmy summer evening, the quiet peace is shattered by the screeching call of a ghost.*'
Each chapter starts with a narrative style introduction about each bird, just like the example above. Why do you think the author chooses to do this in a nonfiction book?

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4. There are a number of nonfiction features in the book that help the reader navigate and comprehend the information, such as an index page, contents page, glossary and labelled diagrams.

What other feature has the author included throughout the text to assist the reader?
How is this a helpful tool?

Geography

1. Look at the distribution maps for each bird. What are some observations or generalisations you can begin to make about birds based on these maps?
2. We can see in this book that some birds will migrate to new environments with the seasons. What are some reasons that a bird or an animal would need to make such a long journey?

Activities

Science

Amazing adaptations

Throughout this book we have learnt a lot about the physical and behavioural adaptations that birds have evolved to survive in a wide range of environments and situations. Using this knowledge, you are going to create your own unique bird, complete with purposeful adaptations that aid in its survival in the wild.

Steps:

1. Start planning your bird and establishing its habitat, diet, appearance and behaviours. Remember to focus on the unique adaptations and how they assist in the survival of the bird you have created.
2. Illustrate and label your bird.
3. Write an explanation that justifies the behavioural and physical adaptations of your bird and how these adaptations help it find food and survive in its environment.

Noticing birds

This book is all about birds and how to identify them. Now you can put this knowledge into practice. Using the worksheet on page 8, go birdwatching and record the different birds you notice. Don't worry – you don't have to be an expert at identifying birds. The worksheet shows the same legend symbols for the types of birds featured in the book. If you see a parrot, put a dash next to the parrot symbol, if you see a shorebird put a dash next to the shorebird symbol.

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You can take this birdwatching sheet with you to school, the park, the beach, the creek or even in your own backyard, and start practising your bird identification and data collection skills.

Identifying birds

If you want to keep practising your birdwatching and identification skills, take the questionnaire on pages 9–10 with you next time you go birdwatching. When you notice a bird that piques your curiosity, take some time to observe the bird, watch how it behaves and how it moves. After observing the bird for a while, answer as many of the questions on the worksheet as you can and see if you can identify your bird.

Celebrity beaks

You've probably played celebrity heads before – now it's time for celebrity beaks! One student will sit in front of the class with one of the birds from the book above their head (which they cannot see). The student can hold a copy of *This Bird* to help them. This student will then begin to ask closed questions about adaptations, habitat, diet, appearance and behaviours, such as:

Am I a sea bird?

Am I nocturnal?

Do I have bright feathers?

Am I a granivore?

Using the information they collect from their questions, and using the book in their hands, this student will attempt to guess which bird they are.

Label a bird

Use the image of a black-cockatoo on the worksheet on page 11 to label the different features of a bird.

As an extra challenge, write an explanation for what each of these features is used for.

English

Bird poetry

After engaging in the information-rich pages of the book, students will take some time to select a bird of their choice to focus on. After selecting a bird that captures their interest, students will use key information from the text, such as appearance, behaviour, habitat, diet and any other unique traits, as inspiration to write an original poem.

Students may choose their poetic form (e.g. free verse, acrostic, haiku or rhyming couplets) and are encouraged to use figurative language, sensory details and imagery to bring their bird to life on the page and deliver the key information.



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Information report

The way the authors have structured and delivered information about all the birds in this book is incredibly fun and engaging, as well as being a terrific educational resource. Today you will be taking inspiration from this and emulating their style to create your own information report for a bird of your choice that's not represented in this book. After selecting your bird, spend some time researching the bird's key information, diet, habitat, appearance and behaviours. Once you have collated all your research, it's time to write like the authors of *This Bird*.

Structure:

1. Title 'This bird ...'
2. Name, diet, habitat.
3. Narrative-style descriptive passage with interesting facts.
4. Factually written passage on appearance and behaviours.
5. Factually written passage on habitat and how to see these birds.
6. Include the legend symbols to indicate what type of bird it is.

Creative writing prompt

Use this engaging prompt to inspire some creative writing.

'On a moonlit, balmy summer evening, the quiet peace is shattered by the screeching call of a ghost.'

Where did this noise come from?

What will happen next?

Why is this thing screeching?

Who heard this sound?

When will this screeching stop?

Text vs illustrations

Using a Venn diagram, compare the information conveyed through the written text with the information presented in the illustrations. Think about the key information, appearance, diet, habitat and behaviour. After comparing the written and visual information in *This Bird*, write a short paragraph justifying the value of multimodal texts in helping readers understand complex information. Students should draw on specific examples from the book (e.g. how illustrations clarify bird behaviour or highlight habitat details that aren't described in the text).

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Geography

Migration matters

We saw a range of birds with very different behavioural adaptations that aid in their survival. Today we are going to explore the migration patterns of one or more birds in the book and how these connect different parts of Australia (or even nearby countries).

1. Trace the migratory routes of this bird on a map.
2. Explain why this bird needs to leave one environment and seek out another.
3. Explain how this migratory adaptation helps the survival of this bird.
4. Present all your information on a poster to teach others about the migratory behaviours of this bird.

The Arts

Birds in motion

Astred has created some beautiful and lively scenes with the birds in this book. A long time ago, this was considered unusual. Botanical and zoological artists were much more scientific and anatomical in the way they illustrated nature. But one artist broke the mould: John Audubon combined scientific accuracy with artistic splendour. He portrayed birds in motion – flying, feeding and nesting – in vivid and dramatic backgrounds (see some examples at <https://www.audubon.org/birds-of-america>). This not only provided readers with details about habitat, diet and behaviour, but also captured their imagination.


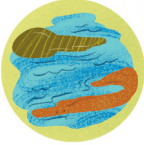




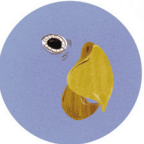





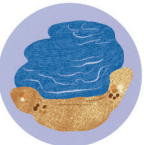
Today you will take inspiration from Astred Hicks and John Audubon and create an action-packed and informative illustration of a bird of your choice.

1. Choose a bird not represented in this book.
2. Do some quick research about its appearance, habitat, diet and behaviour.
3. Incorporate all these elements into one dramatic illustration. Make sure your birds are in motion!

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Noticing birds

Teachers: see page 4 in the notes for instructions.

Illustrations © Astred Hicks

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Identifying birds

Use these questions to identify birds you see in the wild.

What does this bird eat? (You can choose more than one option)

- Insects
- Seeds
- Nectar
- Meat (small animals)
- Fruit
- Fish

Or something else: _____

Where does this bird live? (You can choose more than one option)

- Rainforest
- Desert
- Bushland
- Grasslands
- Wetlands
- Coastal areas
- Urban areas (parks, backyards, cities)

Or somewhere else: _____

What time of day is this bird most active?

- During the day (Diurnal)
- At night (Nocturnal)

What colours can you see on this bird?

What size is this bird?

- Very small (like a fairy-wren)
- Small (like a willie wagtail)
- Medium (like a magpie)
- Large (like a cockatoo)
- Very large (like an emu or eagle)

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What kind of sound does this bird make?

Try writing down how it sounds:

What is the shape of this bird's beak?

- Short and thick (good for cracking seeds)
- Long and curved (good for sipping nectar)
- Hooked (good for tearing meat)
- Long and pointed (good for fishing or probing)
- Thin and straight (good for picking insects)

How does this bird move?

- Flies a lot
- Hops or walks on the ground
- Swims
- Climbs trees

Other: _____

Does this bird live alone or in a group?

- Alone
- In pairs
- In flocks or colonies

Now it's time to make a guess!

Based on your answers, what bird do you think it is?

I think this bird is a: _____

Now you can share your bird knowledge with others!

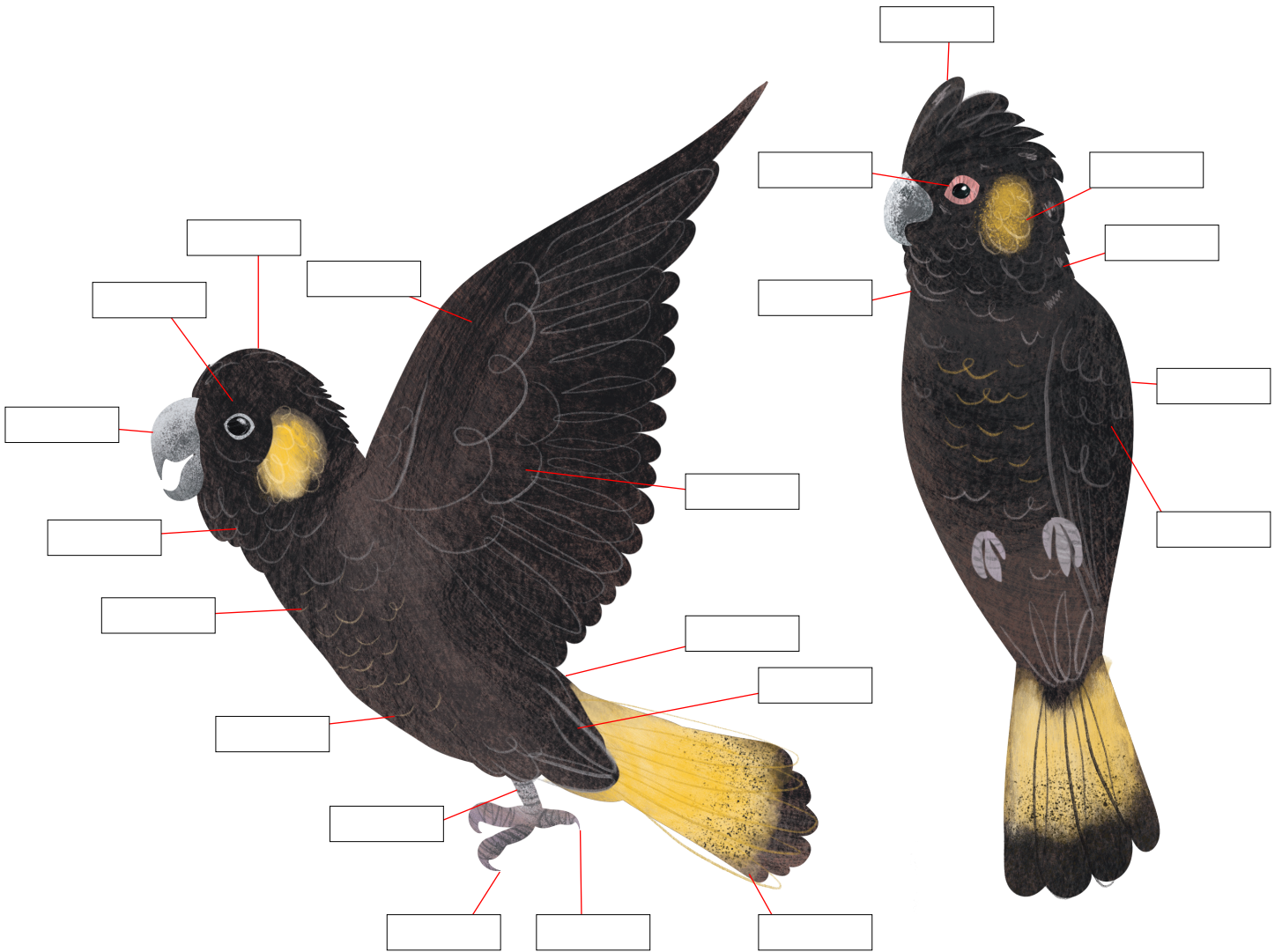


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Label a bird

Teachers: see page 5 in the notes for instructions.



Illustrations © Astred Hicks

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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 Inquiry: Planning and Conducting</p> <ul style="list-style-type: none"> Suggest and follow safe procedures to investigate questions and test predictions (AC9S2I02) 	<p>English: Language: Text structure and organisation</p> <ul style="list-style-type: none"> Explore how texts are organised according to their purpose, such as to recount, narrate, express opinion, inform, report and explain (AC9E1LA03) <p>Language for expressing and developing ideas</p> <ul style="list-style-type: none"> Experiment with and begin to make conscious choices of vocabulary to suit the topic (AC9E2LA09) <p>Literature: Literature and contexts</p> <ul style="list-style-type: none"> Discuss how language and images are used to create characters, settings and events in literature by First Nations Australian, and wide-ranging Australian and world authors and illustrators (AC9E1LE01) <p>Literacy: Texts in context</p> <ul style="list-style-type: none"> Discuss different texts and identify some features that indicate their purposes (AC9E1LY01) Identify how similar topics and information are presented in different types of texts (AC9E2LY01) <p>Interacting with others</p> <ul style="list-style-type: none"> Use interaction skills including turn-taking, speaking clearly, using active listening behaviours and responding to the contributions of others, and contributing ideas and questions (AC9E1LY02) Use interaction skills when engaging with topics, actively listening to others, receiving instructions and extending own ideas, speaking appropriately, expressing and responding to opinions, making statements, and giving instructions (AC9E2LY02) <p>The Arts: Visual arts</p> <ul style="list-style-type: none"> Experiment and play with visual conventions, visual arts processes and materials (AC9AVA2D01) Use visual conventions, visual arts processes and materials to create artworks (AC9AVA2C01) <p>HASS: Geography</p> <ul style="list-style-type: none"> How places can be spatially represented in geographical divisions from local to regional to state/territory, and how people and places are interconnected across those scales (AC9HS2K03)
Years 3/4	<p>Science Understanding: Biological sciences</p> <ul style="list-style-type: none"> Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals (AC9S3U01) <p>Science Inquiry: Planning and Conducting</p> <ul style="list-style-type: none"> Use provided scaffolds to plan and conduct investigations to answer questions or test predictions, including identifying the elements of fair tests, and considering the safe use of materials and equipment (AC9S3I02) 	<p>English: Language: Text structure and organisation</p> <ul style="list-style-type: none"> Describe how texts across the curriculum use different language features and structures relevant to their purpose (AC9E3LA03) <p>Literacy: Texts in context</p> <ul style="list-style-type: none"> Recognise how texts can be created for similar purposes but different audiences (AC9E3LY01) <p>Interacting with others</p> <ul style="list-style-type: none"> Use interaction skills to contribute to conversations and discussions to share information and ideas (AC9E3LY02) <p>Literature: Examining literature</p> <ul style="list-style-type: none"> Discuss how an author uses language and illustrations to portray characters and settings in texts and explore how the settings and events influence the mood of the narrative (AC9E3LE03) <p>The Arts: Visual arts</p> <ul style="list-style-type: none"> Experiment with a range of ways to use visual conventions, visual arts processes and materials (AC9AVA4D01) Use visual conventions, visual arts processes and materials to create artworks that communicate ideas, perspectives and/or meaning (AC9AVA4C01)

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<p>Years 5/6</p>	<p>Science Understanding: Biological sciences</p> <ul style="list-style-type: none">Examine how particular structural features and behaviours of living things enable their survival in specific habitats (AC9S5U01)Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions (AC9S6U01) <p>Science Inquiry: Planning and Conducting</p> <ul style="list-style-type: none">Plan and conduct repeatable investigations to answer questions, including, as appropriate, deciding the variables to be changed, measured and controlled in fair tests; describing potential risks; planning for the safe use of equipment and materials; and identifying required permissions to conduct investigations on Country/Place (AC9S5I02)	<p>English: Language: Text structure and organisation</p> <ul style="list-style-type: none">Describe how spoken, written and multimodal texts use language features and are typically organised into characteristic stages and phases, depending on purposes in texts (AC9E5LA03)Explain how texts across the curriculum are typically organised into characteristic stages and phases depending on purposes, recognising how authors often adapt text structures and language features (AC9E6LA03) <p>Language for expressing and developing ideas</p> <ul style="list-style-type: none">Explain how the sequence of images in print, digital and film texts has an effect on meaning (AC9E5LA07) <p>Literature: Examining literature</p> <ul style="list-style-type: none">Examine the effects of imagery, including simile, metaphor and personification, and sound devices in narratives, poetry and songs (AC9E5LE04) <p>Creating literature</p> <ul style="list-style-type: none">Create and edit literary texts that adapt plot structure, characters, settings and/or ideas from texts students have experienced, and experiment with literary devices (AC9E6LE05) <p>Literacy: Interacting with others</p> <ul style="list-style-type: none">Use interaction skills and awareness of formality when paraphrasing, questioning, clarifying and interrogating ideas, developing and supporting arguments, and sharing and evaluating information, experiences and opinions (AC9E6LY02) <p>Analysing, interpreting, and evaluating</p> <ul style="list-style-type: none">Analyse how text structures and language features work together to meet the purpose of a text, and engage and influence audiences (AC9E6LY03) <p>The Arts: Visual arts</p> <ul style="list-style-type: none">Use visual conventions, visual arts processes and materials to plan and create artworks that communicate ideas, perspectives and/or meaning (AC9AVA6C01) <p>HASS: Geography</p> <ul style="list-style-type: none">Australia's interconnections with other countries and how these change people and places (AC9HS6K05)The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences (AC9HS5K05)
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Related books from CSIRO Publishing

For younger readers:

- *Cassowary Dad* (<https://www.publish.csiro.au/book/8116>)
- *Swiftly: The Super-fast Parrot* (<https://www.publish.csiro.au/book/8062>)

For older readers:

- *A Hollow Is a Home* (<https://www.publish.csiro.au/book/7729>)
- *Sensational Australian Animals* (<https://www.publish.csiro.au/book/8094>)
- *The Compact Australian Bird Guide* (<https://www.publish.csiro.au/book/7916>)

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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>

Birds in Schools

Birds in Schools is an environmental education project designed by BirdLife Australia and its Urban Birds Program. It teaches students to identify and monitor birds, explore their habitats and ultimately take action for local birdlife. For more information see: <https://birdlife.org.au/projects/birds-in-schools>