# Bird Detective

HABITAT WARRIORS
CREATING LIVING CLASSROOMS

**Hi there, bird watchers! Today we're going to become bird detectives. Grab your binoculars and your keen eyes, and let's learn about the amazing birds that live all around us. Let's see how many different bird species you can find...**

## What you will need

Bird-watching checklist

Bird identification guides or apps – see pages 2-4 for some common bird species

Binoculars (optional)

Camera or smartphone for taking pictures (optional)

## Australian Magpie

Magpies can recognise people! They can remember people's faces for years, and whether that person was nice to them or not.

## Rainbow Lorikeet

Rainbow Lorikeets have a sweet tooth. They love to eat sweet things like fruit and nectar.

## Kookaburra

## Eastern Spinebill

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## Galah

## Fairy Wren

Did you know that Crimson Rosellas change from green to red as they get older?

Galahs can travel up to 70km/h – that's as fast as a car – and fly in flocks of 1000+ birds.

## New Holland Honeyeater

## Crimson Rosella

## Sulphur-crested Cockatoo

Did you know that Sulphur-crested Cockatoos can live up to 100 years and learn to speak words?

## Noisy Miner

Do you know that Noisy Miner's love to live in cities, and can even become a pest?

## Pied Currawong

## King Parrot

Your name: Time: morning afternoon (circle one) Season:

Weather (eg. hot, cold, windy, rainy):

| Bird species | Habitat type (eg. in a tree or bush, on the ground, in the sky, in a hollow) | Sound (eg. whistle, screech, laugh, croak) | What is it doing? (eg. walking, hopping, nesting, eating, flying, singing, perching) |
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# Bird Detective – Teacher Resource

Suggested Lesson time – 1 lesson, approximately 50 minutes.

This lesson will help students learn how to identify different bird species using key features. It can be a standalone lesson or be combined with any other worksheet and lessons in the Habitat Warriors program (for example, linking it to specific habitats with 'What's the Story with Understorey' and 'Wildlife Detectives').

At the end of this lesson students will:

- Identify various native bird species using key characteristics like size, colour and beak shape.
- Analyse patterns and interesting behaviours observed in different bird species.
- Understand the importance of birds in the ecosystem and how to help protect them.

This lesson can be made suitable for all primary levels – suggestions on how you could 'level up' the lesson are also given, while links to the Victorian Curriculum can provide additional ideas.

## Basic Lesson Outline

Introduce the idea of bird identification, or "twitching", as a popular activity for many people. Explain to students why it is important to observe and count birds in their local area.

- Ask students if they are familiar with any native bird species, and ask them to describe what they look like and where they live.
- Ask students where they are most likely to spot bird species in their local area (eg. tree branches and hollows, bushes, nests, nest boxes, near water bodies).

Provide students with the 'Bird Detective' worksheet. Discuss the ethics of bird watching with students.

Show students how to use binoculars properly and how to make quick notes about the birds that they see. Briefly explain how to use the field guide or apps such as Birdlife Australia's BirdFinder, or the Australian Museum's Field Guide to Australia Fauna app to help identify the birds that they see.

Class discussion

- Name one bird that you spotted, and describe its colour, size and beak shape, or any other identifying features.
- Which birds were easiest to identify, and why? Were there any birds that looked similar to each other? How did you tell them apart?
- What behaviours did you notice in the birds that you observed?
- Did the birds that you observed prefer certain types of trees or plants? Why?
- What are some threats that birds face in their natural habitat?
- How can we help protect the birds in our local area?
- How can you take what you learned today and apply it to help birds in your own backyard?

## Lesson Level Up

There are multiple ways to extend and expand this lesson to make it more comprehensive and/or introduce more complex topics for older children/year levels. For example:

Expand the Science component:

- Discuss the different morphological features (e.g. wing, beak and tail shape, nape, crown and breast colour, eye colour) and other information (e.g. habitat type, bird behaviour and calls) that we can use to identify birds.
- Discuss how human activities can affect bird habitat, and what can be done to mitigate these impacts.

Expand the English component:

- Ask students to write about one Australian native bird species that they either observed during the exercise or that they find interesting. Students can discuss the adaptations that help this bird survive in its' environment (for example, an urban environment).
- Ask students to research the habitat of a specific bird species that they observed.
- Write a short story about "A Day in the Life of a Bird" with an illustration of the bird. Compile the stories into a storybook that can be shared with the class and parents.

The complexity of this section could be adjusted depending on year level.

## Detailed Curriculum Links

| Science | | | |
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| | **Foundation – Level 2** | **Level 3 – Level 4** | **Level 5 – Level 6** |
| **Science Understanding** | | | |
| **Science as a human endeavour** | People use science in their daily lives. | Science knowledge helps people to understand the effects of their actions. | Scientific understandings, discoveries and inventions are used to inform personal. and community decisions and to solve problems that directly affect people's lives. |
| **Biological sciences** | Living things have a variety of external features and live in different places where their basic needs, including food, water and shelter, are met. | Living things can be grouped on the basis of observable features and can be distinguished from non-living things. | Living things have structural features and adaptations that help them to survive in their environment |
| **Science Inquiry Skills** | | | |
| **Questioning and Predicting** | Respond to and pose questions, and make predictions about familiar objects and events. | With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge. | With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be based on previous experiences or general rules. |

| Science | | | |
|---|---|---|---|
| | **Foundation – Level 2** | **Level 3 – Level 4** | **Level 5 – Level 6** |
| **Planning and conducting** | Participate in guided investigations, including making observations using the senses, to explore and answer questions. | Suggest ways to plan and conduct investigations to find answers to questions including consideration of the elements of fair tests. | With guidance, plan appropriate investigation types to answer questions or solve problems and use equipment, technologies and materials safely, identifying potential risks. |
| | | Safely use appropriate materials, tools, equipment and technologies. | |
| **Recording and processing** | Use informal measurements in the collection and recording of observations. | Use formal measurements in the collection and recording of observations. | Construct and use a range of representations, including tables and graphs, to record, represent and describe observations, patterns or relationships in data. |
| | Use a range of methods, including drawings and provided tables, to sort information. | Use a range of methods including tables and column graphs to represent data and to identify patterns and trends. | |
| **Analysing and evaluating** | Compare observations and predictions with those of others. | Compare results with predictions, suggesting possible reasons for findings. | Compare data with predictions and use as evidence in developing explanations |
| | | | Suggest improvements to the methods used to investigate a question or solve a problem. |
| **Communicating** | Represent and communicate observations and ideas about changes in objects and events in a variety of ways. | Represent and communicate observations, ideas and findings to show patterns and relationships using formal and informal scientific language. | Communicate ideas and processes using evidence to develop explanations of events and phenomena and to identify simple cause-and-effect relationships. |
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| Mathematics | | | |
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| | **Foundation – Level 2** | **Level 3 – Level 4** | **Level 5 – Level 6** |
| **Measurement and Geometry** | | | |
| **Using units of measurement** | F: Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language<br><br>L1: Measure and compare the lengths, masses and capacities of pairs of objects using uniform informal units<br><br>L2 Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units | L3: Measure, order and compare objects using familiar metric units of length, area, mass and capacity<br><br>L4: Use scaled instruments to measure and compare lengths, masses, capacities and temperatures | L5: Choose appropriate units of measurement for length, area, volume, capacity and mass<br><br>L6: Connect decimal representations to the metric system |
| **Statistics and Probability** | | | |
| **Chance** | | | L6: Describe probabilities using fractions, decimals and percentages<br><br>Compare observed frequencies across experiments with expected frequencies |

| Statistics and Probability cont. | | | |
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| | **Foundation – Level 2** | **Level 3 – Level 4** | **Level 5 – Level 6** |
| **Data Representation and Interpretation** | | L3: Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies<br><br>Interpret and compare data displays | L5: Pose questions and collect categorical or numerical data by observation or survey<br><br>Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies<br><br>Describe and interpret different data sets in context |