

TEACHER PAGE***Bird Beaks and Backyard Gardens***

Classification of living things

Interactions between living things and their environment

Key inquiry questions

How can we group birds?

How are environments and birds interdependent?

Science and Technology K-6**Outcomes**

ST2 1WS S questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations

ST2 2DP T selects and uses materials, tools and equipment to develop solutions for a need or opportunity

ST2-4LW-S compares features and characteristics of living and non-living things

Students

- collect data and identify patterns to group living things according to their external features, and distinguish them from non-living things (ACSSU044)
- identify that science involves making predictions and describing patterns and relationships
- describe how living things depend on each other and the environment to survive, for example: (ACSSU073) SysT – bees and flowers – birds eat and disperse seeds

Skills Focus

This series of lessons requires students to use design and production skills to create a garden design to help small native birds.

Design and Production Skills Continuum***Identifying and Defining***

- define simple problems by determining and defining a process
- develop a sequence of steps and decisions (algorithms) to solve a problem (ACTDIP010)

Researching and Planning

- develop, record and communicate design ideas and decisions using appropriate technical terms

TEACHER PAGE**Lesson / activity outline**

This series of lessons enables students to classify birds according to their unique features and characteristics. Students will investigate how environments and birds are interdependent and will design a garden to support the survival of three groups of small Australian birds; honeyeaters, seed eaters and insect eaters.

Required resources, equipment and technology

- A device to watch the YouTube video and access other weblinks
- This worksheet (online or printed)

Weblinks utilised

ABC Kids Listen – Noisy Yarns

<https://www.abc.net.au/kidslisten/noisy-by-nature/noisy-yarns/13448406>

Science made fun – Bird beaks and adaptations

<https://sciencemadefun.net/blog/birds-beaks-and-adaptations/>

Birdlife Australia – Find a bird

<https://www.birdlife.org.au/all-about-birds/australias-birds/find-a-bird/>

Birds In Backyards – Video: Gardening for Small Native Birds

<https://www.birdsinbackyards.net/Your-Garden-How-make-it-safe-haven-birds/Gardening-Birds>

YouTube – Helping Aussie Birds – The birds in backyards program

<https://www.youtube.com/watch?v=6VIXB9wyMaA>

What do bird beaks have to do with backyard gardens? Let's investigate!

Activity 1 – Listening to Country – Noisy Yarn

Immerse yourself in the sounds of nature and listen to some interesting bird calls on this wonderful podcast. You might want to close your eyes and imagine you are there. Listen to the whole podcast first before thinking about the questions. You can always go back and listen again.

<https://www.abc.net.au/kidslisten/noisy-by-nature/noisy-yarns/13448406>

1. What did you learn about Acknowledgement of Country from Ann and Rudi?

2. What birds do Ann and Rudi hear on their bushwalk? Which was your favourite and why?

3. What does it mean to give nature space and why is it important?

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Activity 2 – Types of beaks and their uses

Bird beaks come in different shapes and sizes according to their function (what they are used for). Some birds eat fruits and seeds, some eat nectar, some eat meat (carnivores) and some are omnivores, meaning they eat both plants and animals/insects.

Sifting, sucking, cracking, crushing, spearing, tearing, picking and probing. These are just a few of the things birds can do with their beaks!

Click on the link below. Read through the different types of bird beaks and how they are used for feeding to answer the questions below.

<https://sciencemadefun.net/blog/birds-beaks-and-adaptations/>

1. What three words describe the beak of nectar feeding birds?

2. What are cone shaped beaks used for?

3. Name three meat eating birds with hooked beaks.

4. What sort of beaks are used for splitting open hard fruits and nuts?

Activity 3 – Classifying birds

We can group birds based on what they eat. Use your knowledge of bird beaks to complete the Bird Beak Classification activity on the next 2 pages.

Here is a link that will help you if you aren't sure.

<https://www.birdlife.org.au/all-about-birds/australias-birds/find-a-bird/>

Type the name of the bird into the search bar and click the blue search button. Your bird will appear below the search bar. Click on the picture or text to open a whole page of information on your bird. Scroll down and click on **Behaviour** to find out what they eat.

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Bird Beak Classification Activity

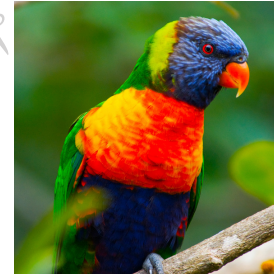
Look at each of the birds below and determine whether they are fruit/seed eaters, nectar eaters, omnivores or carnivores by the shape of their beaks. Cut around each and place in the correct column on the next page.



Australian Magpie



Kookaburra



Rainbow Lorikeet



Eastern Spinebill



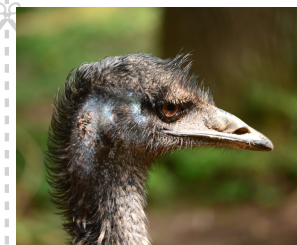
Blue-faced
Honeyeater



Little Wattlebird



Australian masked
owl



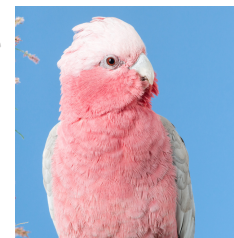
Emu



Peacock



Sulphur-crested Cockatoo



Galah



Tawny Frogmouth

Bird Beak Classification Activity

Cut and paste the birds (or write their name) in the correct category below according to their beaks.

Omnivores eat both plant and animal matter. Carnivores eat meat which includes insects.

**Seed/fruit
eaters**

nectar eaters

omnivores

carnivores

Activity 4 – Time to get outside!

Find a spot where you can sit, listen and watch for birds. It might be your backyard, a local park or bush track close to home. Do you recognise any of the birds from your last activity? What do they sound like?

**Activity 5 – Why are many bird species under threat?**

Watch the video ‘Helping Aussie Birds’ and answer the question below.

<https://www.youtube.com/watch?v=6VIXB9wyMaA>

What threats does presenter Sarah Murray say are impacting the survival of Aussie birds?

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Activity 6 – Gardening for small native birds

Click on the link to watch the video and answer the questions below.

<https://www.birdsinbackyards.net/Video-Gardening-Small-Native-Birds>

1. What sort of habitat provides good food, shelter and nesting places for small native birds?

2. Name 3 native plants that attract honeyeaters.

3. Name 3 native plants that attract insect eaters.

4. Name 3 native plants that attract seed eaters.

Activity 7 – Design a garden

Use the information you have gathered to design a backyard garden that will provide a perfect habitat for our threatened small native birds.

The Birds in Backyards website contains all the information you need to research and design your garden.

<https://www.birdsinbackyards.net/Your-Garden-How-make-it-safe-haven-birds/Gardening-Birds>

Don't forget to share your designs with your class/teacher and Brewongle.

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My Garden Design