HABITAT WARRIORS
CREATING LIVING CLASSROOMS

# Design a Habitat

Have you ever wondered what it would be like to create the perfect home for wildlife? Imagine you are a habitat architect, and your job is to design the most amazing habitat for the wildlife that lives in your local area.

## What you will need

Large sheet of paper

Pens, pencils

## What to do

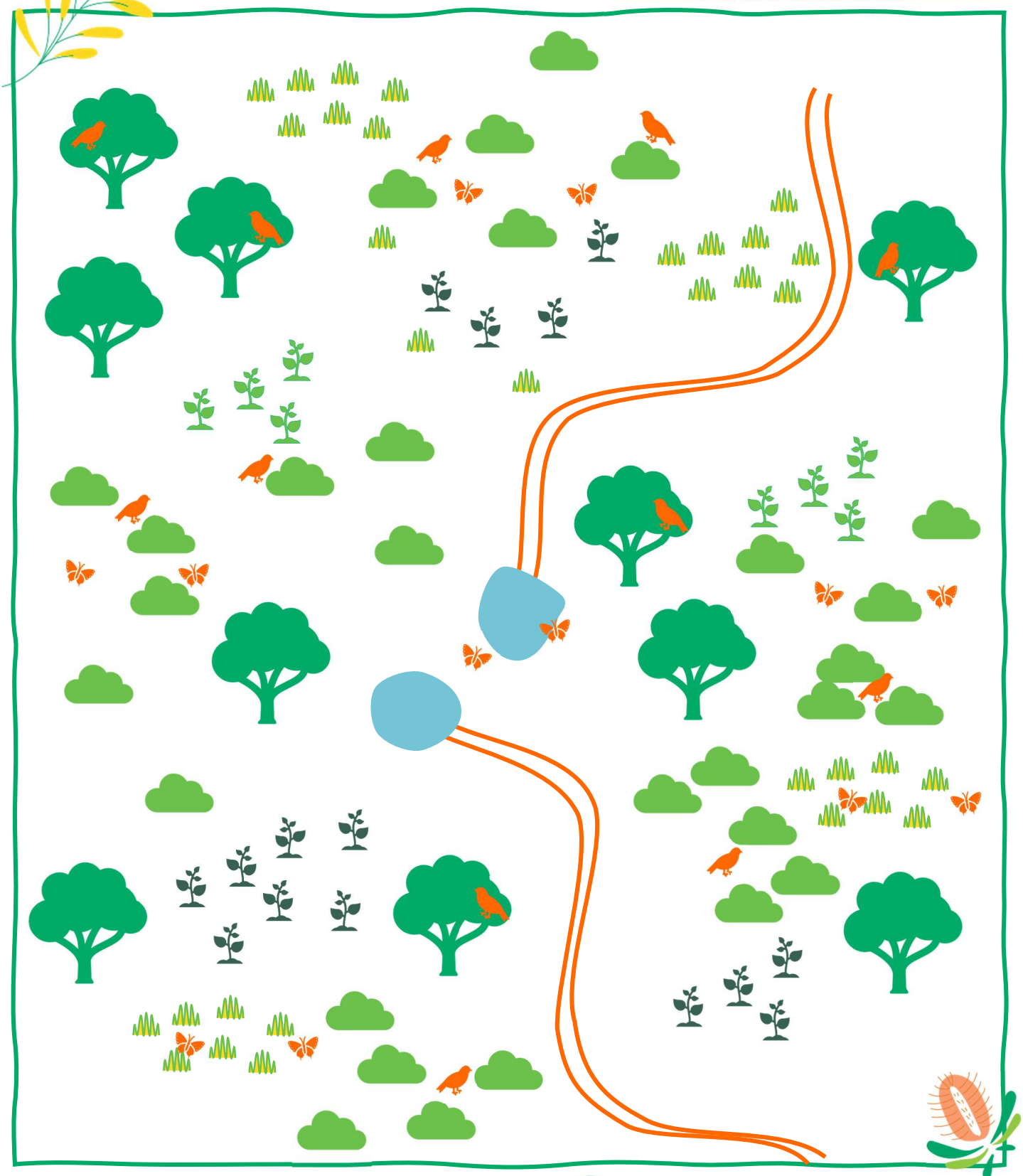
1. Grab some coloured pencils and picture how you would like your planting site to look. Draw it using your imagination.

2. Try to include existing features like trees and rocks, and then add new plants and any extra animal habitats like a nest box, fallen logs or an insect hotel. Label different parts of your habitat, and explain the purpose of each habitat element (eg. rocks for sheltering)

3. Here are some more tips:

- Think about what things animals need for food and shelter.
- Use different types of plants (such as grasses = spiky and smooth and shrubs = dense and open), as these provide different types of food and shelter for wildlife.
- Don't forget to draw some insects, lizards, frogs and birds that you think would like to use your planting site.

HABITAT WARRIORS
CREATING LIVING CLASSROOMS



Tree Shrub New planting Grass

# Design a Habitat – Teacher Resource

Suggested Lesson time – 1 lesson, approximately 50 minutes.

This lesson will help students understand the concept of habitat layers and be able to identify the different layers in a local outdoor environment. 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', 'Lovely Leaf Litter' and 'Wildlife Detectives').

Students may also like to construct a minibeast hotel for their planting site – see the 'Minibeast Hotel' worksheet for this activity.

At the end of this lesson students will:

- Understand the essential elements required for suitable habitat for wildlife, including food, water and shelter.
- Understand some of the impacts of habitat loss on our native wildlife.

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 habitat, and describe what makes a good habitat for our native wildlife (i.e. food, water, shelter).

- Ask students to name some local wildlife species that live around your school or local area. What kinds of homes do they have?
- Ask students to describe the key habitat elements needed to support native wildlife (lots of different types of plants, water source, logs, leaf litter, rocks etc). This can be done by brainstorming in small groups or as a class.

Provide students with the 'Design a Habitat' worksheet. Ask students to present their habitat design to the class (either individually or as a group), and explain how it meets the needs of local wildlife.

Class discussion

- How did you decide which elements to include in your habitat?
- Would you change anything about your design to improve the habitat for wildlife, if you had more time?
- Why is it important to protect and create habitat for wildlife in our local area?
- What might happen to our native wildlife if they lose their habitat?
- How can you take what you learned today and apply it to help wildlife 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 how human activities can affect local wildlife habitat, and what can be done to mitigate these impacts.
- Ask students to imagine how our changing climate might impact their habitat, and suggest ways to adapt their habitat design to meet these changes.

Expand the English component:

- Ask students to write about one thing that they can do to help local wildlife in their own backyard.
- Write a short story about how the habitat that the student has designed will help to encourage and protect local native wildlife
- Ask students to create a diary entry from the perspective of a native animal living in the habitat that they designed.

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

## Detailed Curriculum Links

| Science | | | |
|---|---|---|---|
| | **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.<br>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 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.<br>Safely use appropriate materials, tools, equipment and technologies. | With guidance, plan appropriate investigation types to answer questions or solve problems and use equipment, technologies and materials safely, identifying potential risks. |
| **Recording and processing** | | | |
| **Analysing and evaluating** | | | |
| **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. |
| | | | |
| **English** | | | |
| **Language** | | | |
| Phonics and Word Knowledge | | | |
| | | | |
| **Literacy** | | | |
| Interpreting, analysing, evaluating<br><br>Texts in context | | | |

| Creating Designed Solutions | | | |
|---|---|---|---|
| **Investigating** | Explore needs or opportunities for designing, and the technologies needed to realise designed solutions | Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment and the techniques needed to create designed solutions | Critique needs or opportunities for designing, and investigate materials, components, tools, equipment and processes to achieve intended designed solutions |
| **Generating** | Visualise, generate, and communicate design ideas through describing, drawing and modelling | Generate, develop, and communicate design ideas and decisions using appropriate technical terms and graphical representation techniques | Generate, develop, communicate and document design ideas and processes for audiences using appropriate technical terms and graphical representation techniques |