

# It's Log-ical

When a tree falls and starts to decay, it becomes a wonderful home for wildlife. Lots of critters live in and on fallen logs and rotting tree stumps.

Underneath a log, there's a whole community of animals and plants. Insects from ants and beetles to worms and millipedes help break down the log, turning it into rich soil that helps new plants grow. Plants such as fungi "munch" on the log, breaking it down bit by bit. Without these plants and animals, over time our forests and woodlands would become buried in fallen trees!

Logs also provide shelter and homes for wildlife such as insects, frogs, lizards, snakes and even small mammals such as antechinus (a small, carnivorous marsupial) and bush and swamp rats.

## What to do

Walk around your planting site or a local park and find a fallen log or a rotting tree stump.

Make sure not to disturb the log- it's playing an important role for plants and wildlife!

Take a good look and answer the questions on the next page.



**Jacky  
Dragon**



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Are there signs of frogs, lizards and insects, in, on or around the log? What about plants like

How can wildlife benefit from the fallen log you found? Hint: it might be a source of food or shelter.

How do you think the tree died? Did it happen recently or a long time ago?

What happens to a tree after it dies?

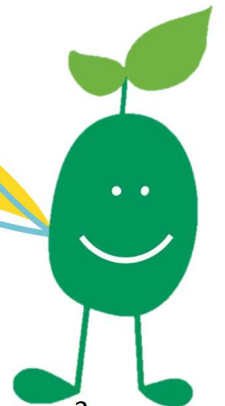


**Golden Stag Beetle**

Golden Stag Beetles are like shiny little jewels in the forest.

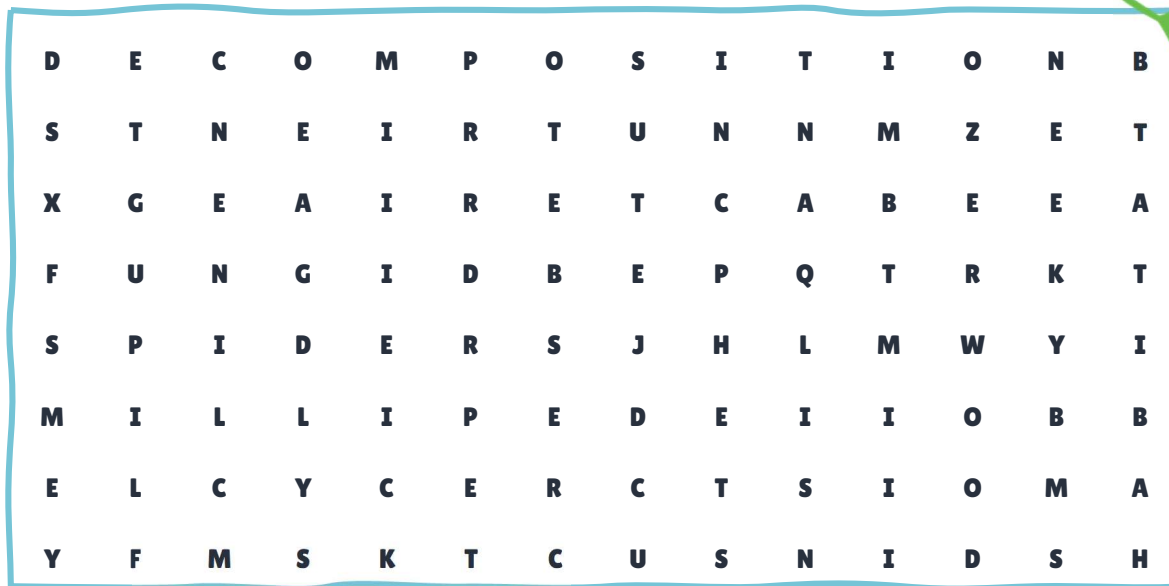
Likes: Chewing on rotting logs which they feed on when young. Hiding under logs.

Dislikes: Other Stag Beetles on their turf! Male Golden Stag Beetles stand on top of rotting logs to defend their territory.



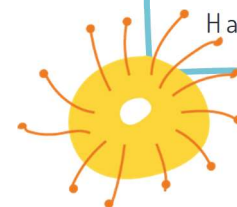
# It's Log-ical

Your fallen log or tree stump is called a "microhabitat". Do this word search to discover some important components in this microhabitat...



- |               |           |
|---------------|-----------|
| Air           | Insect    |
| Ant           | Mite      |
| Bee           | Millipede |
| Beetle        | Moist     |
| Dirt          | Recycle   |
| Decomposition | Spiders   |
| Fungi         | Wood      |
| Habitat       |           |

Source: PLT 2023



**I love to eat insects and spiders  
- do you know what I am?**

## It's Log-ical – Teacher Resource

Suggested Lesson time – 1 lesson, approximately 50 minutes each

This lesson will help students understand what a 'microhabitat' is, in terms of the broader idea of habitat. It can be a standalone lesson or be combined with any other worksheet and lessons in the Habitat Warriors range, for example linking it to other terrestrial habitats with 'What's the Story with Understorey', 'Lovely Leaf Litter' and 'Habitat Assessment', or to specific species with 'Insect Safari' or 'Wildlife Detective'.

At the end of this lesson students will:

- Know what a 'microhabitat' is, and how fallen trees and logs contribute to microhabitat in the environment.
- Understand that different animals use the microhabitat provided by fallen logs.
- Be able to name some animals that use fallen logs to live in and survive.

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

### Basic Lesson Outline

Introduce the concept of habitats, and microhabitats, as areas where animals can live and survive.

- Ask students to name some types of animal habitat on the school grounds
- Why do you think it's called 'microhabitat'? What might be different in a microhabitat, compared to a larger 'macro' habitat? (hint: things like light, temperature, humidity, etc).
- What kind of animals might use microhabitats and why?

Provide students with the 'It's Log-ical' worksheet.

Explain the practical task:

- Logs should not be moved – they are providing habitat for animals and plants, and could be a safety hazard if moved
- Organise the class into small groups to undertake the observation task
- Leave plenty of time for the students to complete the practical task

Class discussion:

- Was it easy to find logs at your site?
- What did you find out about the logs you observed?
- What sort of animals do you think use logs as microhabitat? Did you see any animals?
- What other microhabitats did you see while you were outside, if any?
- How could the school provide a better variety of microhabitats in the grounds to support animal and plant biodiversity?

## 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 English component: Using some of the words in the provided word search, ask students to write a short descriptive text describing habitats, and microhabitat as a special type of habitat. This activity can be altered to suit any primary level.
- Expand the Science component: Many species use fallen logs at different times in their life-cycle, such as some species of lizard – they use the log as a refuge to hide from predators, and to keep out of extreme temperatures and weather, and they can also lay their eggs under the log, and hunt insects that come to visit the log.
- Expand the lesson to discuss the life cycle of a species that uses the microhabitat provided by logs; examples could be lizards, the Golden Stag Beetle, or even frogs that lay eggs (frogspawn) in puddles in fallen logs. 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
<b>Science Understanding</b>			
<b>Science as a human endeavour</b>	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
<b>Biological sciences</b>	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
<b>Science Inquiry Skills</b>			
<b>Questioning and Predicting</b>	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
<b>Planning and conducting</b>	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 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
<b>Recording and processing</b>	Use informal measurements in the collection and recording of observations Use a range of methods, including drawings and provided tables, to sort information	Use formal measurements in the collection and recording of observations Use a range of methods including tables and column graphs to represent data and to identify patterns and trends	Construct and use a range of representations, including tables and graphs, to record, represent and describe observations, patterns or relationships in data
<b>Analysing and evaluating</b>	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

<b>Science</b>			
	<b>Foundation – Level 2</b>	<b>Level 3 – Level 4</b>	<b>Level 5 – Level 6</b>
<b>Communicating</b>	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
<b>English</b>			
	<b>Foundation – Level 2</b>	<b>Level 3 – Level 4</b>	<b>Level 5 – Level 6</b>
<b>Language</b>			
Phonics and Word Knowledge			
<b>Literacy</b>			
Interpreting, analysing, evaluating Texts in context			