

Stage 1

Grassy Box Woodland

Discovering Nature's Neighbours



Duration est.
13 hours



Tamworth Regional
LANDCARE
ASSOCIATION

Stage 1

Exploring the plants, animals, soil and habitats of a Grassy Box Woodland in North West NSW.

This unit introduces students to the living and non-living components of a Grassy Box Woodland ecosystem through hands-on exploration, sensory learning and inquiry-based investigations. Students develop an appreciation of the plants, animals, soils and habitats found within their local environment and begin to understand that all living things have needs that must be met in order to survive.

Through observation, play-based learning and scientific investigations, students explore biodiversity, habitats, healthy soil, native wildlife and the importance of caring for the environment. Students are encouraged to recognise how humans are connected to nature and how their actions can help protect and improve local environments.

Aboriginal perspectives are embedded throughout the unit, introducing students to the concept of Caring for Country and the understanding that people, plants, animals and places are all connected. Students are encouraged to develop a sense of wonder, responsibility and appreciation for the natural world and begin to understand how healthy environments support healthy communities.

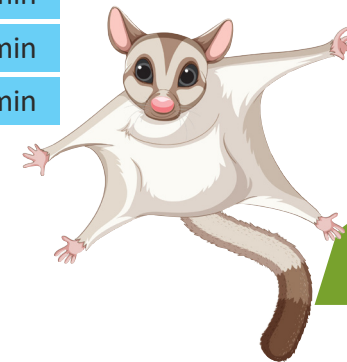
Lesson 1: Welcome to the Grassy Box Woodland	Duration: 75min
Lesson 2: Healthy Environment Building Blocks	Duration: 75min
Lesson 3: Wonderful Worms and Life Beneath Our Feet	Duration: 100min
Lesson 4: Soil Scrutiny - The Foundation of Life	Duration: 80min
Lesson 5: Groundcover Close-Up - Nature's Tiny Garden	Duration: 80min
Lesson 6: Groundcover Café - Who's Living in Nature's Restaurant?	Duration: 80min
Lesson 7: Little Critters and the Hungry Echidna	Duration: 80min
Lesson 8: Native Residents and Woodland Treasure Hunt	Duration: 90min
Lesson 9: Tree Tales - The Stories of Our Woodland	Duration: 90min

Skills Assessed

Throughout this unit, students develop and demonstrate skills in:

- Observing and exploring natural environments.
- Identifying and classifying living and non-living things.
- Recording observations through drawings, tally marks and simple written responses.
- Comparing and describing features of plants, animals and habitats.
- Predicting, questioning and sharing ideas.
- Communicating observations using appropriate scientific vocabulary.
- Working collaboratively during practical investigations.
- Using their senses to investigate the natural environment.
- Recognising simple relationships between living things and their habitats.
- Demonstrating respect for living things and responsible environmental behaviour.

COLOURING BOOK
DOWNLOAD



Tamworth Regional
LANDCARE
ASSOCIATION

Stage 1: Overview

Key Inquiry Questions

What lives in a Grassy Box Woodland?

What are the living and non-living things in our environment?

What do plants and animals need to survive?

How do living things depend on each other?

How can we care for the places where plants and animals live?

How does biodiversity contribute to healthy environments and healthy people?

Outcomes

NESA Science and Technology

ST1-1WS-S: Observes, questions and collects data to communicate ideas.

ST1-2DP-T: Uses materials, tools and processes to develop solutions.

ST1-4LW-S: Describes observable features of living things and their environments.

NESA HSIE (Geography)

GE1-1: Describes features of places and the connections people have with places.

GE1-2: Identifies ways in which people interact with and care for places.

Australian Curriculum (Science)

AC9S1U01: Living things have basic needs and live in habitats where those needs are met.

AC9S1I02: Participate in investigations and record observations.

Humanities and Social Sciences

AC9HS1K01: Natural and constructed features of places.

AC9HS1K02: People care for places in different ways.

Key Concepts

Living and non-living things

Habitats

Biodiversity

Soil as a living environment

Interdependence

Caring for Country

Regeneration

Observation using the senses

Local Species (North West NSW)

Trees: White Box, Yellow Box, Blakely's Red Gum, Cypress Pine.

Groundcover: Kangaroo Grass, Wallaby Grass, native herbs and wildflowers, shrub understorey layers.

Animals: Echidna, Sugar Glider, Eastern Grey Kangaroo, Microbats.

Birds: Kookaburra, Superb Fairy-wren, Galah, Wedge-tailed Eagle.

Invertebrates: Earthworms, ants, beetles, fungi, spiders.

Student Resource

Leaf Litter: Exploring the mysteries of a hidden world- Rachel Tonkin (ISBN: 0207198225)

Australian Bush Creatures Myke Mollard (ISBN: 9781925868869)

Fauna: Australia's most curious creatures Tania McCartney (ISBN: 9780642279545)

Bush Babies Kim Dale (ISBN: 0734408757)

Patterns of Australia, Bronwyn Pincroft (ISBN: 1877003964)

Bowerbird Blues, Aura Parker (ISBN: 9781760269609)

Kookaburra Kookaburra Bridget Farmer (ISBN: 9781760760281)

The Rainbirds, David Metzenthén & Sally Rippin (ISBN: 0734408862)

Refugees, David Miller (ISBN: 0734406339)

Life in a Hollow, David Cullen & Suzanne Houghton (ISBN: 9781486316342)

Come home, Bigibila: A story of an echidna finding its way back to Country-Corey Tutt (ISBN: 9781761181863)

The Echidna near my place, Sue Whiting & Cate James (ISBN: 9781760652401)

Looking After Country With Fire, Victor Steffenssen (ISBN: 9781741177)

The Lorax, Dr Seuss (ISBN: 000195458)

The Hunt, Narelle Oliver (ISBN: 085091874)



Tamworth Regional
LANDCARE
ASSOCIATION

Stage 1: Lesson 1

Welcome to the Grassy Box Woodland



Worksheet

Wildlife in Your Backyard

Materials Required

- Wildlife in Your Backyard worksheet
- Photographs of a Grassy Box Woodland in North West NSW
- Local species posters or identification cards (birds, mammals, reptiles, insects and native plants)
- Whiteboard or large chart paper
- Markers
- Clipboards and pencils (*optional if outdoors*)
- Local map showing the Grassy Box Woodland region of North West NSW (*optional*)
- Magnifying glasses (*optional for an introductory nature walk*)

Teacher Preparation

- Prepare photographs or images of a local Grassy Box Woodland.
- Print the Wildlife in Your Backyard worksheet.
- Gather local species posters or identification cards.
- Prepare a class chart titled “What Lives in a Grassy Box Woodland?”
- Select a safe outdoor area for students to observe the woodland (*if applicable*).

Assessment

Students will:

- Identify living and non-living things within a Grassy Box Woodland.
- Recognise some native animals that live in their local environment.
- Explain one way they can care for wildlife and their habitats.
- Participate respectfully in class discussions and observations.

Aboriginal Perspective

Discuss how Kamilaroi/Gomeri peoples have cared for Country for thousands of years by understanding that plants, animals, water and people are all connected.

Explain that just like people, animals need food, water and shelter, and that caring for Country means caring for every living thing and respecting the places where they live.

Language: Gulbiyaay - Welcome

For Kamilaroi people, coming onto Country is more than entering an outdoor environment; it is entering a living cultural landscape. The Grassy Box Woodland holds plants, animals, water, earth and sky, but also people, knowledge, stories and relationships to place. Being welcomed onto Country comes with respect, taking time to listen, look around and recognise that you are learning in a place that has been known and cared for by generations before you.

Consider: If you were visiting Country, what could you do to acknowledge and show respect for the Country you are learning on?

Stage 1: Lesson 1

Teaching and Learning

Activity 1

Welcome to the Grassy Box Woodland

Gather students together and introduce the unit by asking: "What do you think lives in a Grassy Box Woodland?"

Share the following introduction: What is a Grassy Box Woodland?

A Grassy Box Woodland is like a neighbourhood for nature. It is a special type of Australian bushland found in North West New South Wales, where native trees such as White Box (*Eucalyptus albens*), Yellow Box (*Eucalyptus melliodora*) and Blakely's Red Gum (*Eucalyptus blakelyi*) grow above a carpet of native grasses, along with the understorey shrub layer, herbs and wildflowers. These woodlands are home to many different birds, mammals, reptiles, insects and tiny soil creatures that all depend on each other to survive. Unlike a thick forest, the trees are spread out, allowing sunlight to reach the ground so grasses and wildflowers can grow.

Every living thing has an important role, and together they create a healthy home for wildlife. We are also part of this environment, and we can help care for it by looking after the plants, animals and soil that make Grassy Box Woodlands so special. When we care for Grassy Box Woodlands, we are helping nature grow stronger and healthier for future generations.

Every plant, animal and tiny soil organism has an important role to play in keeping the woodland healthy. By learning about these connections, we can all help care for Country and regenerate the landscapes that support healthy soils, healthy plants, healthy animals and healthy people. Together, we can make a positive difference by protecting, restoring and celebrating the unique Grassy Box Woodlands of North West New South Wales.

Activity 2

Living or non-living?

Students participate in a class brainstorm identifying the living and non-living things they might find in a Grassy Box Woodland.

Create a class chart with two headings:

- Living Things
- Non-living Things

Discuss why each item belongs in its group.

Activity 3

Wildlife in your backyard

Students complete the Wildlife in Your Backyard worksheet.

Discuss:

- What animals visit our backyards?
- Where do they find food?
- Where do they find water?
- Where do they find shelter?
- What might happen if trees, logs or native plants were removed?

Students then create a class list of simple ways they can care for wildlife at home and at school.

How to make an Insect/Bee hotel:

https://www.abc.net.au/abckids/early-education/sustainability-and-nature/play-school-green-team-native-bees/13370464?utm_source=chatgpt.com

Stage 1: Lesson 2

Healthy environment building blocks



Worksheet

Healthy Humans Benefiting from Biodiversity

Materials Required

- Healthy Humans Benefiting from Biodiversity worksheet
- Building blocks, wooden blocks, stacking cups or recycled boxes
- A4 cards labelled:
 - Healthy Soil
 - Native Plants
 - Native Animals
 - Tree Hollows
 - Leaf Litter
 - Clean Air
 - Clean Water
- Whiteboard or large chart paper
- Markers
- Clipboards and pencils (optional)

Teacher Preparation

- Print the Healthy Humans Benefiting from Biodiversity worksheet.
- Prepare the labelled Building Block cards.
- Gather building blocks or stacking materials.
- Prepare a class discussion chart titled "What Makes a Healthy Woodland?"

Assessment

Students will:

- Identify the building blocks of a healthy woodland.
- Explain that healthy ecosystems depend on many different living and non-living things working together.
- Describe how biodiversity benefits both nature and people.
- Suggest one way they can help care for the environment.

Aboriginal Perspective

Introduce the idea that Aboriginal peoples have cared for Country for thousands of years by understanding that everything in nature is connected. Healthy soil, clean water, native plants, animals and people all depend on one another.

Language: Dhii - Totem / roles and responsibilities.

For Kamilaroi people, relationships with Country can also carry responsibilities. Totemic relationships are one way people may hold a particular connection and responsibilities towards animals, plants and other parts of Country.) For example, a person with a particular animal as their totem may adopt a special attitude of respect towards that animal. They may have responsibilities not to eat or injure it, and to watch for its signs and warnings of danger. This gives us a different way of thinking about a healthy woodland: we are not only asking what the plants, animals, soil and water do for one another, but what responsibilities people have within those relationships.

Consider: What is one responsibility you could take for caring for the Country where you live or learn?

Stage 1: Lesson 2

Teaching and Learning

Activity 1

Building a Healthy Woodland

*Gather students together and ask:
"What do you think every healthy woodland needs to survive?"*

Using building blocks, invite students to build a tower together. As each block is added, place one of the labelled cards onto the tower:

- Healthy Soil
- Native Plants
- Native Animals
- Tree Hollows
- Leaf Litter
- Clean Air
- Clean Water

Explain that every part of a healthy woodland is important and works together to support life.

Ask students:

- Which building block do you think is the most important?
- What might happen if one of these building blocks disappeared?

Carefully remove one block from the tower and observe what happens.

Discuss how removing one important part of the environment can affect everything else.

Explain that just like the tower, healthy ecosystems depend on all their parts working together.

Activity 2

Healthy Humans Benefiting from Biodiversity

*Introduce the word biodiversity by explaining:
"Biodiversity means there are lots of different living things, including plants, animals, insects and tiny soil creatures, all living together."*

Students complete the Healthy Humans Benefiting from Biodiversity worksheet through teacher guidance.

Together discuss how each of these contributes to healthy people:

- Healthy soil
- Native plants
- Native animals

- Tree hollows
- Leaf litter
- Clean air
- Clean water

Explain that when nature is healthy, it helps people stay healthy too.

Activity 3

How Can We Help Nature?

Invite students to suggest simple ways they can care for the environment at home and at school.

Examples may include:

- Plant a native tree.
- Leave logs where animals live.
- Pick up rubbish.
- Save water.
- Care for wildlife.
- Protect native plants.

Conclude by explaining that every small action helps keep the Grassy Box Woodland healthy.

Stage 1: Lesson 3

Wonderful worms and life beneath our feet



Worksheet

- Worms Factsheet
- Wonderful Worms
- Worm Storyboard

Materials Required

- Worms Factsheet
- Wonderful Worms worksheet
- Worm Storyboard worksheet
- Large clear glass or plastic jar
- Small amount of damp soil
- Small amount of fine damp sand
- Three or four healthy earthworms
- Small spade or trowel
- Decayed leaves or leaf litter
- Black paper or black cardboard
- Adhesive tape or elastic band
- Spray bottle with water (optional to keep soil moist)
- Magnifying glasses
- Clipboards and pencils (optional)
- Hand wipes or access to handwashing facilities

Teacher Preparation

- Collect healthy earthworms prior to the lesson or identify a suitable area where students can safely find them.
- Prepare the worm jar by gathering all materials.
- Print the Worms Factsheet, Wonderful Worms worksheet and Worm Storyboard.
- Familiarise yourself with the worm habitat experiment.
- Prepare the guided visualisation, "A Day in the Life of Wally the Worm."

Lesson Reflection

Gather students together and ask:

- What did Wally teach us today?
- Why are worms important?
- How do worms help plants grow?

Finish together by saying: "Healthy Soil... Healthy Worms... Healthy Woodland!"

Assessment

Students will:

- Identify the habitat needs of earthworms.
- Describe how worms help improve soil health.
- Predict and observe changes within the worm jar investigation.
- Demonstrate their understanding through the Worm Storyboard.

Aboriginal Perspective

For Aboriginal peoples, healthy soils are recognised as the foundation of healthy Country. Traditional Ecological Knowledge reflects a deep understanding of the relationships between soil, water, plants, animals and seasonal change. Observing natural indicators, including insects such as cicadas, has long helped guide seasonal activities and land management practices. Discuss how healthy soils allow rainwater to infiltrate into the ground, reducing runoff, supporting plant growth and replenishing groundwater. Using the Water Infiltration Demonstration, encourage students to compare how water moves through healthy, biologically active soil compared with compacted or degraded soil. Introduce the Cicada Life Cycle to explore the remarkable underground stage of a cicada's life. Explain that cicada larvae spend several years living beneath the soil, feeding on tree roots before emerging as adults. This provides an excellent example of how healthy soils support biodiversity and why many important parts of an ecosystem remain hidden beneath our feet.

Language: Gayarraylanha - Life cycle / change

Kamilaroi knowledge of Country comes from watching change as well as knowing what is there. Within a woodland, changes in plants, insects, animals, weather and water can be signs that other changes are occurring or approaching. Life cycles such as the cicada moving from beneath the ground to above it remind us that much of what is happening on Country may be unseen until the conditions are right. Learning these patterns over generations builds a deeper knowledge of place.

Identify: Can you name a change you have noticed in nature that tells you something else is happening or about to happen?

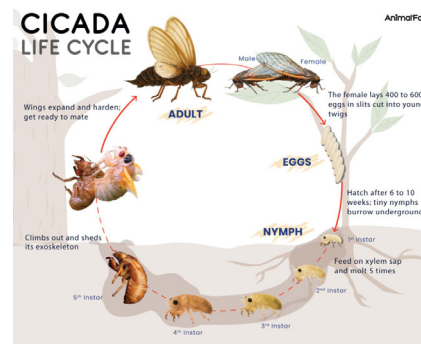


Image Source: Animalfact.com

Stage 1: Lesson 3

Teaching and Learning

Activity 1

Meet Wally the Worm

Gather students together and introduce earthworms.

Ask: "What do you already know about worms?"

Read and discuss the Worms Factsheet, explaining that worms help break down old leaves and plants, recycle nutrients and make tunnels that help air and water move through the soil.

Explain that although worms are small, they are one of nature's hardest workers and play an important role in keeping soil healthy.

Activity 2

Wonderful Worms Investigation

Introduce the Wonderful Worms worksheet and the worm jar investigation

Working together, students build a worm habitat by carefully layering damp sand, soil and decayed leaves inside a large clear jar.

Students gently add the earthworms and predict:

- What will the worms do?
- Where will they move?
- Why do they need damp soil?
- What might happen to the leaves over time?

Cover the outside of the jar with black paper to create a dark environment for the worms.

Discuss how students will observe changes to the worm habitat over the coming days

Activity 3

A Day in the Life of Wally the Worm

Invite students to sit quietly and close their eyes.

Lead the class through the guided visualisation:

"Imagine you are Wally the Worm, wriggling through the cool, damp soil beneath the Grassy Box Woodland. You feel soft soil all around you as you make tiny tunnels. You meet other little soil creatures, nibble on fallen leaves and help recycle nature's leftovers. As you move through the soil, you are helping air and water reach plant roots so they can grow strong and healthy." Pause throughout the story to ask:

- What can you feel around you?
- Who might you meet underground?
- What do you like to eat?
- How are you helping the plants above the ground?

Following the visualisation, students complete their Worm Storyboard, illustrating and sequencing "A Day in the Life of Wally the Worm."

Stage 1: Lesson 4

Soil Scrutiny – The Foundation of Life



Materials Required

- Meet Wally the Worm worksheet
- Wonderful Worms worksheet
- Worm Storyboard worksheet
- Building blocks, books or stacking cups
- A4 cards labelled:
 - Air
 - Water
 - Sand
 - Clay
 - Rocks
 - Humus
- Soil collected from the Grassy Box Woodland investigation site
- Magnifying glasses
- Small trowels or scoops
- Small containers or trays for soil exploration
- Water (*for making a small mud pie*)
- Chart paper or whiteboard and markers
- Pictures or identification cards of common soil creatures (*e.g. earthworms, ants, beetles, slaters and field crickets*)
- Hand wipes or access to handwashing facilities
- Speaker or device to play the backing music

Worksheet

- Meet Wally the Worm
- Wonderful Worms
- Worm Storyboard

Teacher Preparation

- Prepare the six labelled soil component cards.
- Collect soil samples from the investigation site (if students are not collecting them themselves).
- Print the Meet Wally the Worm, Wonderful Worms and Worm Storyboard worksheets.
- Organise magnifying glasses, trays and trowels.
- Prepare the building blocks for the Foundation of Life activity.
- Have the backing music ready to play for the lesson reflection.

Assessment

Students will:

- Identify some of the things that make up healthy soil.
- Use their senses to describe soil.
- Explain why healthy soil is important for plants and animals.
- Recognise that earthworms help keep soil healthy.
- Demonstrate an understanding of Wally's important role by completing the Worm Storyboard.

Aboriginal Perspective

Language: Ngami-li - Observe / scrutiny
Careful observation is an important part of knowing Country. For Kamilaroi people, knowledge of a place was built by repeatedly walking it, watching it and noticing differences, including the ground beneath your feet. Colour, texture, moisture, plants, tracks and other small signs can all help build an understanding of a particular place. The more closely we look, the more Country can reveal.

Activity: Draw a small patch of woodland ground as you first see it. Then look again very carefully and add the things you missed the first time.

Visit this website to view Aboriginal Art Symbols and Meaning.

<https://www.aboriginal-bark-paintings.com/aboriginal-art-symbols/>

Encourage students to recognise that every living thing, no matter how small, has an important role in caring for Country.

Stage 1: Lesson 4

Teaching and Learning

Activity 1

Foundation of Life

*Begin the lesson by asking students:
“What do you think would happen
if we built a house without a strong
foundation?”*

Using building blocks, books or stacking cups, invite students to build a small tower.

Carefully remove the bottom block and observe what happens.

Explain that just as buildings need strong foundations, healthy soil is the foundation of life. Healthy soil helps plants grow, which provide food and homes for animals and people.

Encourage students to think about how everything in nature depends on healthy soil.

Activity 2

Soil Detectives

*Students become Soil Detectives as
they investigate woodland soil using
their senses.*

Working in small groups, students:

- Feel the soil • Squeeze it into a ball • Smell the soil.

- Observe its colour and texture using magnifying glasses.

Introduce the six simple ingredients that help make healthy soil using the labelled cards:

- Air • Water • Sand • Clay • Rocks • Humus (*old leaves, sticks & plant material that have broken down*)

Students make a small “mud pie” using the site soil and discuss which ingredients they think are present.

Teacher prompts:

- What does your soil feel like?
- What colour is it?
- Is it dry or damp?
- Can you see anything mixed through the soil?
- Why do you think healthy soil is important?

Provide the students with two soil samples for comparison:

- Healthy soil - soft, damp, crumbly and full of organic matter.
- Compacted soil - hard, dry & tightly packed with very little air space.

Invite students to observe, touch and compare each soil sample.

Encourage them to describe how each sample feels, smells and looks, and to identify which soil they think would be better for plants, worms and other living organisms.

Discuss how healthy soil contains many tiny air spaces that allow water to soak into the ground, helping plant roots grow and providing habitat for worms, insects and microorganisms. In contrast, hard, dry, compacted soil prevents water from infiltrating, making it more difficult for plants and soil animals to survive.

Where possible, demonstrate water infiltration by pouring equal amounts of water onto each soil sample. Students observe how quickly the water enters the healthy soil compared with the compacted soil and discuss why this happens.

Conclude by reinforcing that healthy soils are soft, living ecosystems that support biodiversity, while compacted soils are less able to absorb water, support plant growth and sustain life beneath the ground.

Activity 3

Meet Wally the Worm

*Gather students together and
introduce Wally the Worm using the
Meet Wally the Worm worksheet.*

Introduce:

“Everyone, I’d like you to meet someone very special. This is Wally the Worm. Wally lives underground in the Grassy Box Woodland. Most of the time we don’t see him because he’s busy wriggling through the soil, making tiny tunnels and helping the woodland stay healthy. Wally might be small, but he has a very important job. Every day he helps make the soil healthier so that plants can grow, animals can find food and the woodland can stay healthy.”

Discuss the worksheet together before asking:

- Where would Wally like to live?
- What does Wally like to eat?
- Who might Wally meet underground?
- How does Wally help the woodland?
- Would you like to be Wally for a day?

Students then complete the Worm Storyboard, and “A Day in the Life of Wally the Worm.”

Wally's Soil Jam



Stage 1: Lesson 4 **Extension Music lesson**

Suggested Backing Music:

Play the royalty-free backing track:

School, Teacher, Student – Trap Beat, Hip Hop (Pixabay Music)

<https://pixabay.com/music/beats-school-teacher-student-trap-beat-hip-hop-245060/>

(To be performed with a simple hip-hop beat, clapping and body percussion.)

Teacher

Who's the wriggliest worker underground?

Students

Wally the Worm!

Teacher

Who helps keep our woodland healthy?

Students

Wally the Worm!

Everyone

Wiggle, wiggle, down below, (Wiggle like Wally!)

Helping all the plants to grow. (Stretch up tall!)

Dig and munch, day by day, (Pretend to dig!)

Helping nature all the way! (Thumbs up!)

Healthy soil, healthy trees, (Grow like a tree!)

Birds and bugs, buzzing bees! (Flap like a bird!)

Healthy woodland, here we come,

Thanks to Wally... WIGGLE... WIGGLE... WORM!

Actions

- Clap twice.
- Stomp twice.
- Wiggle like Wally.
- Stretch up like a growing plant.
- Stand tall like a tree.
- Flap your wings like a bird.

Finish by pointing to the ground together and stating:

"Healthy Soil, Healthy Woodland, Caring for Country!"

Stage 1: Lesson 5

Groundcover Close-Up – Nature's Tiny Garden



Worksheet

- Groundcover Close-Up

Materials Required

- Groundcover Close-Up worksheet
- Nature Explorer Frame (quadrat), or one of the following alternatives:
 - Four rulers taped together
 - Four sticks joined with string
 - Hula hoop
 - Square of rope
 - Cardboard picture frame
 - Small towel or mat
- Magnifying glasses
- Clipboards
- Pencils
- Local plant identification cards or photographs (*optional*).

Teacher Preparation

- Select a safe area with a variety of native grasses, herbs and groundcover plants.
- Prepare Nature Explorer Frames or alternative materials.
- Print Groundcover Close-Up worksheets.
- Familiarise yourself with a few common native grasses and herbs found on the site.



Assessment

Students will:

- Observe and identify a variety of groundcover plants.
- Record observations using drawings and simple descriptions.
- Compare different patches of groundcover.
- Explain how plants and soil help each other.
- Demonstrate respect for living things during the investigation

Aboriginal Perspective

Language: Baayanga-li - Nature of things
Kamilaroi/Gomeri Perspective

The ground layer of a Grassy Box Woodland is more than simply “grass”. Kamilaroi people developed knowledge of the many different plants growing on Country, how to recognise them, where they grow, when they appear and the different ways particular plants may be used or hold cultural importance. Language is also part of that knowledge, carrying names and understandings of the plants and places around us.

Look closely: Choose one plant in the groundcover. What would you need to learn about it to really know that plant, rather than simply recognise what it looks like? Use five of your six senses (omit taste) to gain a further understanding of the plant. Ask the students to draw the plant and identify the characteristics of the plant. i.e., fine hairs/colour.

Stage 1: Lesson 5

Teaching and Learning

Activity 1

Become Nature Detectives

*Gather students together and ask:
"Have you ever wondered what
lives beneath your feet?"*

Explain that although the ground may look like "just grass", it is actually a busy little garden full of different plants and tiny animals. Tell students that today they are going to become Nature Detectives, looking closely at a very small part of the woodland. Introduce the Nature Explorer Frame.

Explain:

"Scientists often use a square called a quadrat to study nature. Today we're going to use our own Nature Explorer Frame to discover how many wonderful things are living in just one small patch of woodland."

Activity 2

Groundcover Close-Up

*Working in pairs, students gently
place their Nature Explorer Frame
onto the ground.*

Using magnifying glasses, they carefully observe everything growing inside their frame.

Students look for:

- Different grasses
- Small herbs
- Leaves
- Flowers
- Moss (if present)
- Seeds
- Tiny insects

Students complete the Groundcover Close-Up worksheet by recording:

- How many different plants they can see.

- Which plant is the tallest?
- Which plant is the smallest?
- Which colours can they find?
- Can they see any insects?
- What surprised them?

Encourage students to compare their Nature Explorer Frame with another group's.

Teacher prompts:

- What makes your patch different?
- Which patch has more kinds of plants?
- Why do you think different plants grow together?

Activity 3

Do Plants and Soil Need Each Other?

*Gather students together around
one investigation area.*



Ask:

- What do plants need to grow?
- What does the soil give the plants?
- What happens to old leaves when they fall on the ground?

Explain simply that healthy soil helps plants grow, and healthy plants help protect the soil by holding it together with their roots.

Students gently feel the grass roots and observe how they help keep the soil in place.

Conclude by explaining:

"Plants and soil are best friends, they help each other every day."

Extension Activity:

Ask students;

"If you were only as tall as a blade of grass, what do you think your tiny garden would look like?"

Invite students to share one new plant or one interesting thing they discovered during their investigation.

Finish together by saying:

"Every little plant has an important part to play in keeping our woodland healthy!"

Ask students what would happen if we pour water on grass bare earth. (through teacher demonstration record the results).

Stage 1: Lesson 6

Groundcover Café – Who's Living in Nature's Restaurant?



Worksheet

- Groundcover Café
- Little Critters Identification Worksheet 1
- Little Critters Identification Worksheet 2

Materials Required

- Groundcover Café worksheet
- Little Critters Identification Worksheets
- Sweep nets
- Magnifying glasses
- Small collection containers or bug viewers (*optional – insects should be returned safely to their habitat*)
- Clipboards
- Pencils
- Identification charts or photographs of common woodland insects and invertebrates
- Nature Explorer Frames (*optional*)
- Hand wipes or access to handwashing facilities

Teacher Preparation

- Select a safe woodland area with a variety of grasses and flowering plants.
- Check the area for hazards before students begin searching.
- Print worksheets and identification charts.
- Organise sweep nets, magnifying glasses and bug viewers.
- Remind students that all living things should be handled gently and returned to where they were found.

Assessment

Students will:

- Identify a variety of insects and small animals living within the groundcover.
- Use simple identification charts to classify little critters.
- Record observations using drawings and simple descriptions.
- Explain why insects are important in the Grassy Box Woodland.
- Construct a simple picture food chain using local woodland species.

Aboriginal Perspective

Discuss how Aboriginal peoples have long understood that even the smallest insects have an important role in keeping Country healthy. Insects help pollinate plants, recycle natural materials and provide food for birds, reptiles and mammals. Ants also carry seeds. Encourage students to observe respectfully, recognising that every living thing has a purpose and deserves to be cared for.

Language: Guni - Bee (working choice)
Kamilaroi/Gomeri Perspective

Small creatures within the woodland can also be signs to read. Kamilaroi people learnt by observing which insects appeared at different times, what plants were flowering, how animals were behaving and what was changing in the weather and surrounding Country. Seeing an insect is therefore not only about identifying what it is, watching what it is doing and what is happening around it can add another piece to our knowledge of that place.

Observe: Choose one insect and watch it quietly for a short time. What is it doing, what does it visit, and what else is happening around it?

Stage 1: Lesson 6

Teaching and Learning

Activity 1

Welcome to the Groundcover Café

Gather students together and ask:
"If insects could visit a café, what do you think would be on the menu?"

Explain that the Grassy Box Woodland is like a giant café where many tiny animals come to find food, shelter and water.
Some insects come to eat leaves.
Some come to drink nectar.
Some come to hunt other insects.
Some are looking for a safe place to hide.
Today students become Little Critter Detectives as they explore the busy café beneath their feet.

Activity 2

Little Critter Safari

Working in pairs, students use sweep nets and magnifying glasses to gently search for insects and other tiny animals living amongst the grasses and groundcover

Students use the Little Critters Identification Worksheets to identify as many different animals as possible.

They look for little critters, such as:

- Ants
- Beetles
- Ladybirds
- Grasshoppers
- Crickets
- Slaters

- Spiders
- Caterpillars
- Bees
- Butterflies

Encourage students to observe carefully before returning every animal safely to its habitat.

Activity 3

Who's Eating Who?

Gather students together and discuss:

- Why are these little critters living here?
- What might they be eating?
- What animals might eat them?
- Why do they need grasses and plants?

Introduce the idea that every living thing depends on something else for food.
Using pictures or drawings, students create a simple picture food chain using the organisms they have observed.
Example:
Grass → Grasshopper → Kookaburra
Explain that this is called a food chain.

Activity 4

Groundcover Café

Students complete the Groundcover Café worksheet, recording the insects they found and describing one interesting fact about their favourite little critter.

Extension Activity:

Ask students;
"If you were a tiny insect living in the Groundcover Café, which café would you choose and why?"
Invite students to share the most interesting little critter they discovered.
Finish together by saying:
"Every little critter has an important job in keeping our woodland healthy!"

Stage 1: Lesson 7

Little Critters and the Hungry Echidna



Worksheet

- Little Critters - The Hungry Echidna
- Little Critters Identification Worksheet 2

Materials Required

- Little Critters - The Hungry Echidna worksheet
- Magnifying glasses
- Clipboards and pencils
- Small bug viewers or collection trays (*optional*)
- Invertebrate identification cards or photographs
- Photograph, soft toy or picture book featuring an echidna (*optional*)
- Small cones or markers to define the investigation area (*optional*)
- Hand wipes or access to handwashing facilities

Teacher Preparation

- Select a safe woodland area with leaf litter, logs and natural groundcover.
- Check the site for hazards.
- Print the worksheet and prepare identification cards.
- Remind students to carefully lift and replace logs and leaf litter, respecting the homes of woodland animals.

Assessment

Students will:

- Identify a variety of little critters living in leaf litter.
- Explain what echidnas need to survive.
- Identify features of a healthy woodland habitat.
- Demonstrate respect for living things during the investigation.
- Discuss the importance of leaving habitat, such as logs, rocks and fallen timber.

Aboriginal Perspective

Language: Bigibilla - Echidna (working choice)

Kamilaroi/Gomeri Perspective

Knowing an animal means more than knowing its name or what it looks like. Kamilaroi knowledge of woodland animals can include where they live and move, what they eat, their behaviour, and the tracks and other signs they leave behind. An animal does not need to be seen for its presence to be known. By learning to read these signs, people can understand which animals are sharing that Country with them.

Investigate: If you never saw the echidna itself, what signs could tell you that a Bigibilla had been moving or feeding in the woodland?

Stage 1: Lesson 7

Teaching and Learning

Activity 1

Meet Eddie the Echidna (Bigibila)

Introduce Eddie the Echidna.

“Hello everyone! My name is Eddie the Echidna. I’m very hungry today and I need your help! My favourite lunch is hiding beneath the leaves and logs. Can you become an echidna and help me find my lunch?”

Discuss:

- What does an echidna look like?
- What does it eat?
- Why does it have a long nose and strong claws?

Explain that echidnas use their long sticky tongues to catch ants, termites and other small insects

Activity 2

The Hungry Echidna Hunt

Working in pairs, students gently place their Nature Explorer Frame onto the ground.

Students become Little Critter Detectives and carefully search through leaf litter and groundcover using magnifying glasses.

Students look for:

- Earthworms
- Ants
- Slaters
- Beetles
- Field crickets
- Spiders
- Other small woodland invertebrates

Ask:

- Would Eddie eat this?
- Why is this a good place to find food?
- What makes this a good home for an echidna?

Students complete the Little Critters – The Hungry Echidna worksheet by identifying the little critters they find and discussing which ones would become Eddie’s lunch.

Conclude by discussing that healthy Grassy Box Woodlands provide echidnas with everything they need:

- Food
- Water
- Shelter
- Safe places to live

Stage 1: Lesson 8

Native Residents and Woodland Treasure Hunt



Worksheet

- Native Residents
- Woodland Treasure Hunt

Materials Required

- Native Residents worksheet
- Woodland Treasure Hunt worksheet
- Clipboards
- Pencils
- Magnifying glasses
- Australian coins featuring native animals
- Image of the Australian Coat of Arms
- Local species identification cards or photographs (optional)
- Small collection bag or basket (optional for collecting fallen natural items only)
- Hand wipes or access to handwashing facilities.

Teacher Preparation

- Select a safe woodland area with a variety of trees, shrubs and groundcover.
- Print worksheets.
- Gather Australian coins and an image of the Australian Coat of Arms.
- Discuss with students that all wildlife should be observed quietly and respectfully, and that only naturally fallen items are to be collected.

Assessment

Students will:

- Identify native woodland animals and signs of wildlife.
- Record observations using the Native Residents worksheet.
- Identify natural features of Grassy Box Woodlands through the Woodland Treasure Hunt.
- Explain why animals need healthy habitats to survive.
- Demonstrate respect for wildlife and the environment during field investigations.

Aboriginal Perspective

Language: Maniila-waa-ya - Finding (Maniila-y - hunting remains another possibility).

Kamilaroi/Gomeroi Perspective

Kamilaroi people read Country through the signs left within it. Tracks, scats, feathers, nests, scratch marks, digging, chewed plants and other traces can tell us that an animal has passed through, where it may have travelled and sometimes what it was doing. Learning to recognise these signs is part of knowing a woodland without needing to see every animal that lives there.

Activity: Draw the track of one native animal you could recognise. What is another sign that could help you identify that animal without seeing it?

Lesson Reflection

Gather students together and ask:

- Which native animal would you most like to see living in this woodland?
- What was the most interesting treasure you discovered today?
- How can we help protect the homes of these native animals?

Finish together by saying:

“Every plant, every animal and every habitat helps make our Grassy Box Woodland a healthy home!”

Stage 1: Lesson 8

Teaching and Learning

Activity 1

Meet Our Native Residents

Introduce students to some of the native animals that may live in or visit a Grassy Box Woodland, including:

- Echidnas
- Kangaroos
- Galahs
- Sulphur-crested Cockatoos
- Magpies

Using Australian coins and the Australian Coat of Arms, discuss why some native animals have become important Australian symbols and how they represent our unique wildlife.

Ask students:

- Which of these animals have you seen before?
- Where did you see them?
- What do you think they need to survive?

Activity 2

Woodland Wildlife Safari

Students become Woodland Wildlife Rangers.

As they walk through the woodland, students use the Native Residents worksheet to tick off any native animals they see or hear during the investigation. Encourage students to also look for clues that animals have been nearby, such as feathers, nests, burrows, tracks, scats, scratch marks or chewed seed pods.

Discuss:

- Why do these animals choose to live here?
- What food, water or shelter can they find?
- How does this woodland help them survive?

Explain that sometimes scientists learn just as much from animal signs as they do from seeing the animals themselves.



Activity 3

Woodland Treasure Hunt

Students complete the Woodland Treasure Hunt by searching for naturally fallen woodland treasures, including:

- Three waxy leaves from different trees
- Two different types of protective bark
- Two types of woody fruits or seed pods
- One reduced leaf

Students record their discoveries through drawings and observations on their worksheet.

Teacher prompts:

- Which tree do you think this leaf came from?
- Why do some trees have thick bark?
- Why are leaves different shapes?
- Which treasure was the hardest to find?

Conclude by discussing how every tree provides food and shelter for different woodland animals.

Stage 1: Lesson 9

Tree Tales – The Stories of Our Woodland



Worksheet

No worksheet required
(Optional extension: Students create a class “Caring for Country Promise”)

Materials Required

- Umbrella or light-coloured sheet (for Shake, Rattle and Roll)
- Photograph of a remnant tree (*optional*)
- Photograph of a kangaroo (*optional*)
- Clipboards and pencils (*optional*)
- Large sheet of paper or poster paper
- Markers
- Quiet outdoor space within the Grassy Box Woodland

Teacher Preparation

- Select a safe woodland area containing one or more large remnant trees, and shrubs.
- Check the investigation area for hazards.
- Prepare the umbrella for the Shake, Rattle and Roll activity.
- Identify a suitable location for the guided visualisation and class reflection.

Assessment

Students will:

- Identify the features of a remnant tree.
- Explain why remnant trees are important habitats for wildlife.
- Recognise the connections between plants, animals and people.
- Describe one action they can take to care for Country.



Photo credit: Wayne Chaffey

Aboriginal Perspective

Language: Gaay / Gaay-gal - Story / stories (grammar to be confirmed).

Kamilaroi/Gomeroi Perspective

Grassy Box Woodland Country holds cultural stories as well as natural history. Old trees and other features within the landscape can hold evidence of how Kamilaroi old people lived, travelled, gathered resources and used Country. Cultural heritage can help connect what we see in the woodland today with the people who lived within these landscapes before us. Learning to recognise that Country holds this history also teaches us why cultural places and objects must be respected and protected.

Consider: If you came across something in the woodland that you thought might be Aboriginal cultural heritage, what should you do?

Explain that old remnant trees are important parts of Country because they provide homes for wildlife, connect us with the past and remind us that caring for the environment today helps protect it for future generations.

Stage 1: Lesson 9

Teaching and Learning

Activity 1

Tree Tales: The Remnant Tree Game

Gather students around a large, old tree.

Ask: "If this old tree could talk... what stories do you think it would tell us?"
Explain that some trees in the Grassy Box Woodland are called remnant trees. "A remnant tree is a very old tree that has been left standing while much of the surrounding woodland has changed over time. These special trees have been growing here for many years and provide homes, food and shelter for many different animals."
These special trees take 80-100 years to form hollows. They still provide environmental services even when they are dead.
Students become Tree Detectives, carefully observing the remnant tree.

Students look for:

- Different bark patterns
- Leaves
- Hollows
- Branches
- Seeds or gum nuts
- Birds, insects or spider webs
- Signs that animals may have visited the tree

Discuss:

- What animals might live here?
- Why are old trees important?
- What stories could this tree tell about the woodland?

Conclude by explaining that remnant trees are living history and continue to provide important habitat for wildlife today.

Activity 2

Shake, Rattle and Roll

Working together, students hold an umbrella or light-coloured sheet beneath a native tree while the teacher gently shakes a shrub.

Students observe the tiny insects and spiders that fall onto the umbrella before carefully returning them to the tree.
Discuss:

- Were you surprised by how many little animals live in one tree?
- Why do insects like living in trees?
- Which animals might eat these insects?

Explain that every tree is a home for many different living things.

Activity 3

Guided Visualisation

Invite students to sit quietly beneath a tree.

Lead the class through a guided visualisation.
"Close your eyes and imagine you are a kangaroo living in this Grassy Box Woodland. The warm sun is shining, birds are calling and a gentle breeze is moving through the trees. How many different 'calls' can you hear?
Can you name various examples?"

You are looking for fresh grass to eat, cool shade to rest beneath and clean water to drink.
As you hop through the woodland, you see birds, insects, trees and tiny animals all sharing the same home. Think about how every living thing helps make this woodland a healthy place to live."
Allow students a few moments to quietly listen to the sounds of nature.

Activity 4

Caring for Country Circle

Gather students together for one final discussion.

Ask:

- What have we discovered about Grassy Box Woodlands?
- Why are they important?
- Which activity did you enjoy the most?
- How can we help care for Country?

Invite each student to share one promise they will make to help care for nature.
Record these promises on a large class poster titled: Our Caring for Country Promise

Examples may include:

- I will care for wildlife.
- I will leave nature as I found it.
- I will plant native plants.
- I will pick up rubbish.
- I will tell others why Grassy Box Woodlands are special.

Celebrate the completion of the unit by reading the class promises together.

Unit Celebration

Our Landcare Promise

Gather students in a circle with one hand on their heart and one hand towards the woodland.
Together say:

Our Landcare Promise

"We promise to care for our Grassy Box Woodlands.

We will look after the soil.

We will protect our plants and animals.

We will respect Country.

Together we can help nature grow strong for future generations."

Finish together by saying:

"Healthy Soil... Healthy Woodland... Caring for Country!"

Unit Reflection

Throughout the unit, students develop an understanding that every living thing has an important role within the Grassy Box Woodland. Through hands-on investigations, storytelling, guided exploration and outdoor learning, students discover how healthy soil, native plants, animals and people are all connected.

The unit concludes with students sharing their Caring for Country Promise, encouraging them to become active caretakers of their local environment and to recognise that even small actions can contribute to healthy soils, healthy ecosystems and healthy communities for future generations.

Assessment Overview

Formative

- Teacher observation during field investigations and practical activities.
 - Student participation in class discussions, group work and guided investigations.
 - Completion of worksheets and recording observations.
 - Contributions to class brainstorms and reflection activities.
 - Guided visualisations, role-play and storytelling activities.
 - Student explanations, predictions & questioning during investigations.
-

Summative

By the conclusion of the unit, students demonstrate their learning through their ability to:

- Identify living and non-living components of a Grassy Box Woodland.
- Explain the basic needs of plants, animals and soil organisms.
- Describe how healthy soil, plants and animals work together to create a healthy woodland.
- Recognise that biodiversity supports healthy ecosystems and healthy people.
- Identify native woodland plants and animals and describe their habitats.
- Explain the importance of caring for Country and suggest actions that help protect local environments.
- Participate respectfully and safely during outdoor investigations.
- Contribute to the class Caring for Country Promise, demonstrating an understanding of their role as environmental stewards.

