





# AUSTRALIAN Dry Forests & Woodlands NATURE STUDY

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# I'M GLAD YOU'RE HERE

**Hí,** I'm Marie, and I'm delighted that you are exploring Dry Forests and Woodlands with me. It is my hope this nature study guide will encourage you to marvel at our Australian bush.

The Math in Nature: Data & Statistics (referred to as M.I.N: Data & Statistics in this guide) is a companion guide to this study.

However, both guides can be used independently of each other. M.I.N: Data focuses on learning math with bush themed hands on activities.



 $\tau_0$ 

The One Who Created all Things

My Amazing Family

Special Friends

Thank you!

# Say G'Day

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### What's next?

The **Dry Forest & Woodlands Nature Study Guide** is the third in an eight part Australian habitat series which will include:

Oceans Urban Tundra, Ice & Snow Freshwater

Deserts Rainforest Wetland Alpine

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# ADVENTURE AWAITS!

### How do I Use this Nature Study?

### Let's Go Walkabout!

Each chapter in the dry forest and woodland nature study guide will prepare you with the knowledge you need to answer questions when they're blown your way by an eager explorer. It is by no means exhaustive. I'll be referring you to helpful resources or links on the week's topic if you'd like to research it further and walk deeper into the study of forestry and woodlands. These resources and suggestions for walking deeper are located in the sidebar where you'll find the following five prompts.

### **Inspire**

Be inspired and motivated with a video. I hope these prompts enhance your nature investigations.

### **Discover**

Discover stories related to the week's theme which will offer enjoyment and ignite excitement for the topic. Read them aloud to the children or listen to the read aloud version on YouTube. Included with this guide is a notebook page to list the titles of books you and the children have read. Utilize the book report and poem study notebook pages. File these in the student's portfolios.

Most of the books I've listed are either available online or through the library. Please feel free to use your own library for stories related to this unit, and if you've found a gem of a book that would be a great fit, please let me know. The studies do not rely on these books, so don't stress if you can't find a title or if you're unable to visit the library.

After reading a story to your children, ask them to narrate it back to you. Start with the youngest child so the older children are challenged further to recall what was read to them.

Please preview the books first to see if they meet your standards. There are a few books that have a secular worldview. I'd suggest skipping the historical viewpoints and stick to the facts related to the study. Also ensure your children have a firm grounding in Biblical worldview so they'll be able to perceive evolution's point of view on historical science.

### **Investigate**

Research the week's topic with the reference books listed. This is not a complete list and there are many great books available. If you have a resource sitting on your book shelf or have access to another through the library, feel free to use those reference books instead.

### **Engage**

Invite the children to a group activity using the project suggested here. If you don't have time for the extra student assignments, then this is the activity for the week. These ideas will enhance their understanding as they begin to focus on the subject. Photograph activities and use the activity notebook page to paste the image and write a summary of what was made or learnt.

### **Explore**

Explore woodlands and dry forest ecosystems with the ideas listed. Allow the children to play freely outdoors in your area and once their energies have been exhausted (somewhat) begin to engage them with questions and activities. Since, visiting a forest or woodland area on a regular basis may not be possible, explore your local 'woody' parks to compare them with woodland environments, plants and animals. Give them the opportunity to ask questions and share their nature discoveries with you. You'll be able to gauge their interest and understanding of the content covered. Photograph the excursions and use the field trip activity page included with this unit to record places you've visited. Place activity pages into their individual portfolios.

### **Assignments & Projects**

Assignments and projects have been suggested for the four learning styles. The learning styles have been categorised according to how a particular personality learns best. This model was developed by the <a href="Myers-Briggs">Myers-Briggs</a> system. This is a brief description of the four learning styles:

- The Feeler is the people person who enjoys participating in group activities. They are concerned with how people are affected and impacted by circumstances and topics in the world, in the country and their community. They work best with people in good relations with them.
- The Intuitor flows with ideas about how to design projects, what materials to use and how to put it all together. They are full of suggestions and ideas for all types of topics, but they need encouragement to implement and complete assignments.
- The Thinker just wants the facts and they're not interested in opinions. They enjoy research, using textbooks and thrive on a schedule. It's important to be organised with this type of learner.
- The Sensor prefers to get their hands dirty. They insist on starting projects right away and completing them soon. This person is always busy and moving continuously. They don't enjoy research or lengthy discussions, instead, they'd prefer to efficiently accomplish a project with physical effort.

An activity or project is suggested for the three age groups within the learning styles with the following icons as indicators:



Challenge the children by mixing up their preferred activities with more challenging assignments to strengthen their weaknesses.

Some of the assignments will have related notebook pages. If there is no notebooking (NB) page for an activity then please encourage the children to design their own.

Videos can be uploaded and saved in files for individual children. Investigate the Seesaw App which is an online journal where children's work can be displayed and saved according to subject areas for each student. Share the children's projects with family members or friends by inviting them to see and comment on their accomplishments. <a href="Daybook">Daybook</a> is another app where photographs can be stored along with text explaining the activity.

### **Notebook Pages & The Portfolio**

Notebook pages have been included with this dry forest and woodland nature study. Please use them to record field trips, activities, experiments and projects. File the pages into a ring binder to provide a safe place for all the work accomplished through the unit. All notebooking pages are to be filed in a portfolio for presentation and record keeping purposes. The portfolio can be subdivided with the weekly themes or according to subject areas. It's up to you.

### **Vocabulary Words & Woodland Phrases**

A list of vocabulary words and phrases have been included for your convenience in <u>Appendix A</u>. They can be defined through dictionary work, used as spelling words or added to a Woodland <u>Word Wall.</u>

### **Extension Activities**

This section includes a topic related to the current lesson. If a child is interested in learning about a concept then engage him/her in a mini project to indulge their curiosity. Record the work and add it to the portfolio.

In an article "How to Interest Children in the Outdoor World," C. A. Rooper explained:

"...the first thing is to create in the children a real interest in the subject. In order to do this (for children will not do so spontaneously) the parent must lead the way. The parent must first take a lively interest in the subject, and make it, if possible, a kind of "hobby," and then the children will easily be induced to follow. ... and for that purpose nothing answers so well as a walk, the too often despised walk. And yet a walk can be made most attractive as well as useful.

It should be arranged with a definite object, and the route chosen with a special end in view. ... This method will not permit a hurried rush after a quantity of specimens nor a record number of them found, but it will give, which is far more interesting, a thorough knowledge and real acquaintance with a few, and the children will learn from it the beauties, charms, curious adaptations and peculiar habits of certain objects in nature from which knowledge and interest in all will be developed." (PR 13, p. 733)

# READ ALL ABOUT IT

### What Books do I Need?

Following is a list of suggested resources to complement the dry forests and woodlands nature study. The list is not exhaustive, so please use books from your home or community library if you can't find these. The \* indicates book titles may be in the library.

### **Dry Forest and Woodlands Reference Book:**

Choose **one** reference book appropriate for your child's age.

- o \*Australian Landscapes | Forests in Australia by Rachel Dixon. (Primary).
- o \*<u>Ecosystems of Australia | Forests and Woodlands</u> by Greg Pyers. (Primary).
- o \*Discover and Learn About Australian Forests and Woodlands by Pat Slater. (Primary)
- \*Optional: Review <u>Australian Ecosystems with Australian Focus | Australia's Ecosystems</u> by Greg Pyers. (Primary).

### Wildlife Life Reference Book:

These resources are brimming with photographs and facts about the amazing diversity of Australian wildlife. Choose a title for each lesson. I preferred the first title as it covers a variety of animals. Note: Contains evolutionary worldview.

- o \*Junior Encyclopedia of Australian Wildlife by Kylie Currey for Preschool/Primary students.
- o \*Amazing Facts About Australian Mammals by Queensland Museum and Steve Parish.
- \*Amazing Facts About Australian Reptiles by Stephen Swanson. (Primary/Lower Secondary).
- o \*Amazing Facts About Australian Insects & Spiders by Patrick Honan.
- o \* Amazing Facts About Australian Birds by Steve Parish and Karin Cox.

### **Endangered Animal/Plant Resource Book:**

Choose **ONE** title to investigate this topic. I preferred the first title.

- \*A Focus on Dry Forests and Woodlands by Jane Hinchey
- \*Biodiversity of Woodlands by Greg Pyers
- o \*Woodlands and Forests in Danger | Protecting Habitats by Moira Butterfield



Choose

1 only

### **Australian Field Guides for Preschool Students:**

The field guides are great for identifying animal species but they're not necessary. Check your local library for woodland themed field guides.

- O First Field Guide | Australian Mammals | Steve Parish
- o First Field Guide | Australian Birds | Steve Parish
- o First Field Guide | Insects & Spider | Steve Parish
- o First Field Guide | Frogs & Reptiles | Steve Parish

### Australian Field Guides Primary/Secondary/Adult:

- o <u>A Naturalist's Guide to the Reptiles of Australia</u> by Peter Rowland and Chris Farrell.
- o Field Guide to Australian Birds | Steve Parish
- o Field Guide to Australian Mammals | Steve Parish
- o Field Guide to Australian Reptiles | Steve Parish
- o Tracks, Scats & Other Traces by Barbara Triggs
- o Wild Food Plants of Australia by Tim Low



### **Books for Family Reading:**

Choose a family read aloud book or assign a book for individual reading from the list below.

- o Snugglepot and Cuddlepie by May Gibbs (Primary)
- Wombat in the Wild by Lucy Daniels. (Upper Primary)
- o Koalas in Crisis by Lucy Daniels. (Upper Primary)
- Tiger Cat by C.K. Thompson (Upper Primary/Early Elementary)
- Wombat by C.K. Thompson (Upper Primary/Early Elementary)
- o <u>Tiger in the Bush and Devil's Hill</u> by Nan Chauncy
- o Spotty the Bowerbird and Other Stories by E.S. Sorenson
- o Thunderbolt The Falcon by C.K. Thompson
- o Old Bob's Birds by C.K. Tompson
- o Willy Wagtail by C.K. Thompson
- o Magpie the Magnificent by C.K. Thompson

### **Book Recommendations for Each Chapter:**

Following is a list of picture books, story titles or resource books related to the weeks lesson. The books are not essential to the dry forests and woodlands nature study but they do offer information in a more relational way and they're fun. Books marked with an \* can be found at the library.

Choose a book or two for each lesson. Note: Some books have references to evolution.



### **Lesson 1 | Dry Forest & Woodland Biomes:**

- o Over in a Forest: Come Take a Peek by Marianne Berkes | Read Aloud (Preschool/Early Primary).
- Woodland Creatures by Emily Bone | Usborne Young Beginners (Preschool/Early Primary).
- The Great Outdoors | Woodlands | Explore Nature with Facts and Activities by Lisa Regan.
   (Primary).
- o \*<u>Dangerous Creatures of the Forests and Woodlands</u> by Helen Bateman. (Primary).

### **Lesson 2 | Australian Dry Forests & Woodland Biomes:**

- o \*A Walk in the Bush by Gwyn Perkins. Read Aloud. (Preschool).
- o \*Kangaroo Island: A Story of an Australian Mallee Forest by Deidre Langeland. (Primary).

### **Lesson 3 | Ecological Connections**

- o Beauty by Sandra Kendell (Preschool/Early Primary). Read Aloud.
- o Bushland Secrets by Frances Mead and Kathleen Henry. (Primary).
- \*Among the Gum Trees by Melissa Lyne & Kathryn Carter. (Primary).
- \*Life in a Gum Tree by Greg Pyers. (Primary).
- o \*A Focus on Dry Forests & Woodlands by Jane Hinchey. (Primary).
- o \*A Hollow is a Home by Abbie Mitchell. <u>Teacher Notes</u>. (Primary).

### Lesson 4 | Mammals

- \*Koala by Claire Saxby (Preschool/Lower Primary) Read Aloud
- o The Koala Who Could by Rachel Bright (Preschool) Read Aloud
- \*Koala Lou by Mem Fox (Preschool) Read Aloud
- o \*Diary of a Wombat by Jackie French (Preschool) Read Aloud
- Wombat Down Below by Jill Morris (Preschool/Primary).
- Harry the Hairy-nosed Wombat and Other Australian Animal Tales by Jill Morris. Includes stories
  about a Red Kangaroo, a Mountain Possum, a Bush Koala, a Peaceful Platypus and a Nimble

  Numbat
- o The Secret World of Wombats by Jackie French (Primary) Historical evolutionary views.
- o A Wombat's World by Caroline Arnold.
- Wombat Goes Walkabout by Michael Morpurgo. Read Aloud.
- o \*Bouncing Back: An Eastern Barred Bandicoot Story by Rohan Cleave & Coral Tulloch
- o Wombat in the Wild by Lucy Daniels. (Upper Primary)
- Koalas in Crisis by Lucy Daniels. (Upper Primary)
- o <u>Tiger Cat</u> by C.K. Thompson (Upper Primary/Early Elementary)
- Wombat by C.K. Thompson (Upper Primary/Early Elementary)
- o <u>Tiger in the Bush and Devil's Hill</u> by Nan Chauncy
- \*Koala | Life Cycles of Australian Animals by Greg Pyers
- \*Wombat | Life Cycles of Australian Animals by Greg Pyers
- o \*Echidna | Life Cycles of Australian Animals by Greg Pyers

- \*Finding Out About Echidnas by Greg Pyers
- \*Finding Out About Bandicoots by Greg Pyers
- \*Finding Out About Quolls by Greg Pyers

### Lesson 5 | Reptiles

- o <u>Bushland Secrets</u> by Frances Mead and Kathleen Henry. (Preschool/Primary)
- Gecko by Raymond Huber. Read Aloud. (Preschool/Primary).
- o \*Why Am I a Reptile by Greg Pyers.
- o \*Lace Monitor | Life Cycles of Australian Animals by Greg Pyers (Primary).
- \*Life in a Gum Tree by Greg Pyers. (Primary).

### **Lesson 6 | Invertebrates**

- o <u>Insect Detective</u> by Steve and Charlotte Voake. (Preschool/Primary) Read Aloud.
- Heads and Tails by John Canty. (Preschool). Read Aloud.
- o \*Searching for Cicadas by Lesley Gibbs. Read Aloud. (Preschool/Primary). Teacher Notes.
- \*Why Am I an Insect by Greg Pyers. (Presechool).
- o \*Phasmid by Rohan Cleave (Primary).
- \*Crickets by Nikki Bruno. (Primary).
- \*Millipedes by Nikki Bruno. (Primary).
- \*<u>Life in a Gum Tree</u> by Greg Pyers. (Primary).

### Lesson 7 | Birds

- o Kookaburra Kookaburra by Bridget Farmer (Preschool) Read Aloud.
- o Jeremy by Chris Faille (Preschool).. (Read Aloud.
- \*Kookaburra by Clare Saxby. (Preschool/Primary). Teacher Notes.
- \*Why Am I a bird? by Greg Pyers. (Preschool).
- \*Finding Out About Peregrine Falcons by Greg Pyers. (Primary).

### **Reminder: Read Aloud Titles**

- o Spotty the Bowerbird and Other Stories by E.S. Sorenson (Primary)
- o Thunderbolt The Falcon by C.K. Thompson (Primary)
- o Old Bob's Birds by C.K. Tompson (Primary)
- o <u>Willy Wagtail</u> by C.K. Thompson (Primary)
- o Magpie the Magnificent by C.K. Thompson (Primary)

### Lesson 8 | Plants & Fungi

- o Sam's Bush Journey by Sally Morgan. (Preschool). Read Aloud.
- Australian Bush Fairies by Jan Wade. OOP. (Preschool).
- o Forest in the Tree by Ailsa Wild (Primary).
- Australian Wildflower Fairies by Nuri Mass. (Primary).
- \*Australian Landscapes | Forests in Australia by Rachel Dixon. (Primary).
- o \*Ecosystems of Australia | Forests and Woodlands by Greg Pyers. (Primary).

### Lesson 9 | Bushfires

- Fire by Jackie French (Preschool). Read Aloud.
- The Fire Wombat by Jackie French. (Preschool).
- o <u>Bushfire</u> by Tricia Oktober (Preschool).
- o The Bushfire Book: How to be aware and prepare by Polly Marsden. (Primary).

### Lesson 10 | Deforestation

- o Window by Jeannie Baker (Preschool).
- o Bird to Bird by Clare Saxby (Primary).
- o <u>Australian Landscapes | Forests in Australia</u> by Rachel Dixon. (Primary).
- o \*Ecosystems of Australia | Forests and Woodlands by Greg Pyers. (Primary).

# PLAN AHEAD

### What Supplies do I Need?

### Lesson 1 Woodland Biomes

Dry Forest and Woodland themed paraphernalia to prepare and create a study corner.

Collect woodland reference and story books for L1.

Globe or world map.

Prepare an ecosystem nature walk in a woodland park near you. This park will be visited frequently as the wildlife is studied. Nature Journals. Field Trip NB page.

Choose an individual activity for child/children and prepare supplies needed. Print NB pages.

In the Engage section, L2-10, a 'Woodland Wall' project on poster board is worked on each week. It includes pictures or stickers of woodland plants and wildlife with corresponding notecards including interesting information.

<u>Steve Parish | Wildlife</u> <u>Sticker Book</u> is an optional resource for the above project.

> Lesson 2 Australian Woodlands

Map of Australia that clearly shows woodlands.

Visit your woodland park to investigate tree and plant layers.

Collect natural materials to create the woodland small world playscape.

A tray or container to create the playscape in.

Optional: Toy woodland creatures to add to the playscape ecosystem.

Nature Journal

Choose an individual activity for child/children and prepare supplies needed. Print NB pages.

Add woodland words in Appendix A to a Word Wall.

Add types of dry forests and woodland pictures and information cards to Woodland Wall Project.

Lesson 3 Ecological Connections

Collect reference and story books for L3.

Visit your woodland park to investigate ecological connections and hollows.

Collect natural materials to create a gum tree collage.

Nature Journal

Print Art Study NB page.

Choose an individual activity for child/children and prepare supplies needed. Print NB pages.

Add woodland words to word wall.

Add an example of an ecological connection like a food chain or examples of hollows to the Woodland Wall Project.

Lesson 4
Mammals

Collect reference and story books for L4.

Optional: Take either the Australian Mammal Identification Cards or the Animal Track and Scat Identification Cards along on the field trip.

Visit your woodland park to investigate mammals and their tracks. Alternatively, visit a local Native Animal Park. Also visit the park at night to spot nocturnal wildlife. Take a torch.

Nature journal.

Print Art & Poem Study NB page.

Choose an individual activity for child/children and prepare supplies needed. Print NB pages.

Add woodland words to word wall.

Add mammals to the Woodland Wall Project.

Collect reference and story books for L2.

Prepare an interview with a Zoologist.

### Lesson 5 Reptiles

Collect reference and story books for L5.

Optional: Take the <u>Reptile</u>
<u>Identification Cards</u> along on the field trip.

Visit your woodland park to investigate reptiles and their tracks. Alternatively, visit a local Reptile Park. Nature journal & Field Guide.

Print Art & Poem Study NB page.

Choose an individual activity for child/children and prepare supplies needed. Print NB pages.

Add woodland words to word wall.

Add reptiles to the Woodland Wall Project.

Prepare an interview with a Herpetologist.

### Lesson 6 Invertebrates

Collect reference and story books for L6.

Optional: Take one or all of these identification cards on your field trip:

- Bees
- Beetles
- Spiders

Visit your woodland park to investigate Invertebrates. Take tools to help with your investigations: nets, cups for pit traps, torch for dark places & containers for insect collection.

Poem Study NB page.

Prepare an interview with an Entomologist.

### Lesson 7 Birds

Collect reference and story books for L7.

Optional: Take <u>the Bird</u>
<u>Identification Cards</u> along on the field trip.

Visit your woodland park to investigate birds. Alternatively, visit a local Bird Park. Take binoculars and a camera with you. Revisit the park to hear and observe nocturnal birds. Take a torch.

Nature Journal & Field Guide.

Print Art & Poem Study NB page.

Choose an individual activity for child/children and prepare supplies needed. Print NB pages.

Add woodland words to word wall.

Add birds to the Woodland Wall Project.

Prepare an interview with an Ornithologist.

### Lesson 8 Plants & Fungi

Collect reference and story books for L8.

Optional: <u>Download</u> Plant Pattern Cards.

Download Tree Identification Cards.

Nature Journal & Plant/Fungi Field Guide

Visit your woodland park to investigate woodland plant communities. Alternatively, visit a local Botanical Park. Take a camera with you.

Research how to make a herbarium, decide on a design and collect the materials. Plant Press to dry plant specimens. Cardstock. Tape or glue.

Prepare an interview with a Botanist.

### Lesson 9 Bush Fires

Collect reference and story books for L9.

Visit your woodland park or forest to investigate it for evidence of previous bushfires. Optional: if possible, use charcoal from this woodland to create your bushfire art masterpiece. Nature journal.

Cardstock and charcoal.

Choose an individual activity for child/children and prepare supplies needed. Print NB pages.

Add bushfire words to word wall. Add images of bushfires to the Woodland Wall Project.

Prepare an interview with a Firefighter.

### Lesson 10 Forestation

Collect reference and story books for L9.

<u>Paper and the tools</u> needed to recycle paper. Glue. Cardstock for paper collage.

Field Trip to Forest Plantation.

Choose an individual activity for child/children. Print NB pages.

# SCHEDULE IT

### How do I Make the Nature Guide Work for Me?

The following schedule is a suggestion only. Please modify it to suit your family. Don't be a slave to the schedule, fit the unit in when you are able to. There are a few options to choose from:

• There is a lot of information to digest in each lesson and to fully enjoy the experience, I suggest that you take a leisurely walk by aiming to complete a lesson every fornight. There's enough content here for a 20+ week study.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Introduction	Discover	Investigate	Engage	Explore
and Inspiration				
Choose a				
project to work				
on this week.				

• If you'd prefer a brisk walk through the unit then read the introduction, follow the prompts in the sidebar and leave the extra activities and projects.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Introduction	Discover	Investigate	Engage	Explore
and Inspiration				

• You could also complete a lesson in a full day or two. Adjust it to make it work you.

"The child who sees his mother with reverent touch lift an early snowdrop to her lips, learns a higher lesson than the 'print-books' can teach. Years hence, when the children are old enough to understand that science itself is in a sense sacred and demands some sacrifices, all the 'common information' they have been gathering until then, and the habits of observation they have acquired, will form a capital groundwork for a scientific education. In the meantime, let them consider the lilies of the field and the fowls of the air" (Home Education, p. 63).

# Inspire

Inspire children by creating a woodland nature study work space or 'Dry Forest & Woodland' Wall.

Introduce children to Forest and Woodland Habitats with this video slide.

Investigate Deciduous Woodlands and the creatures who live there with this video.

# Discover

Read <u>Over in a Forest:</u>
<u>Come Take a Peek</u> by
Marianne Berkes | <u>Read</u>
<u>Aloud</u> (Preschool/Early
Primary).

Or <u>Woodland Creatures</u> by Emily Bone | Usborne Young Beginners (Preschool/Early Primary).

# Investigate

Investigate woodland biomes by digging deeper:

Read <u>The Great</u>
 Outdoors |
 Woodlands |
 Explore Nature
 with Facts and
 Activities by Lisa
 Regan. (Primary).

# **Dry Forests & Woodlands**

What is a dry forest and woodland biome?



Have you explored a park where trees and shrubs are scattered about allowing the sun to shine through the branches into open spaces?

<u>Woodland</u> biomes resemble a large open park, except we wouldn't see manicured lawns. Instead, bushy shrubs and grasses will be growing in-between a variety of trees.

Woodlands are defined as having medium sized trees with a 20% canopy and open, dry forests have tall trees with a canopy coverage of 30-80%.

Woodlands are one of the most interesting biomes to investigate as it provides several ecosystems that create special homes for many small creatures and birds.

Woodlands around the world are different due to climate, rainfall, plant and animal species. Deciduous woodlands, which are trees that lose their leaves in winter, mostly grow south of the Equator where the climate is moderate.

There are many forests around the world that are evergreen, which means, trees keep their leaves all year round.

The earth's forest biomes are so enormous, covering onethird of the earth's surface, they have the ability to affect weather, temperature and air quality.

There are four main types of forests:

• Tropical Rainforests are diverse wonderlands of plant and

# Investigate

Or <u>Dangerous Creatures of</u>
<u>the Forests and Woodlands</u>
by Helen Bateman
(Primary).

Learn about data collection with M.I.N: Data & Statistics by Jo.

# Engage

Narrate the characteristics of woodland and dry forest habitats.

On a map or world globe, search for the Equator and point out the Northern and Southern Hemispheres.
Boreal forests stretch across the northern hemisphere while deciduous woodlands are in the southern hemisphere.

# **Explore**

Walkabout a wooded park or conservation park in your area. Notice the distance between the trees. How dense or open is the canopy and how much sunshine comes through the branches? What animals or birds live here?

Compare this wooded park to the New Forest National Park in England. What is different?

creature. They have a tree canopy of 80-100%, high rainfall and consistent warm temperatures. We will learn more about the amazing biodiversity of rainforests in the Rainforest Nature Study Guide.

- Subtropical Forests are similar to tropical forests, except they experience a short period of cold which discourages some plants and animals from thriving in this habitat. Subtropical forests often create a border between tropical and temperate forests that is a haven for migratory wildlife transitioning from one area to another.
- <u>Temperate Forests</u> cycle through the four seasons of summer, autumn, winter and spring. Depending on the climate and soil types, temperate forests can be dominated by evergreen coniferous trees, deciduous trees or be a mix of different tree kinds. Temperate forested regions have less plant and wildlife species flourishing in them due to frosty winters and less rainfall.
- <u>Boreal or Taiga Forests</u> are dominated by evergreen coniferous trees and occasionally, scattered spruce and larch trees which have a short growing season due to long, icy, dry winters. Only plants and animal species adapted to long, cold winters thrive in this environment. North of the Equator, runs a vast boreal forest which stretches around the world from North America to Europe and Asia. It covers 16.6 million square kilometres making it the largest land biome on earth.

Since dry forests and woodlands are diverse all around the world, their tree and plant species, animals and birds will be suited to each distinctive ecosystem.

The common characteristic that woodland and dry forest habitats share are trees which are unique for the climate they thrive in and the creatures that exist within the environment.

### Field Trips | Take a virtual field trip to:

- New Forest National Park | England
- Miombo Woodlands, Southern Central Africa
- Taiga/Boreal Forest, Northern Hemisphere

### **Extension Activities:**

Research how Colonial Settlers in Australia depended on forests to supply timber for housing, warmth, furniture and fences. Large areas of woodland were also cleared to establish townships and farmland. How has this affected the woodlands and wildlife today?

# Sensor

What sort of things can you find in a woodland or dry forest area? Collect natural items in a paper bag during your walk. Then throw them out onto a sheet or quilt and begin to categorize them into groups. Compare the items by size, shape and colour. Take a photograph to add to your portfolio.

Watch <u>Animal Adaptations</u> at DK Find Out and explain why a diverse range of animals are only found in certain biomes.

Research the Boreal Forest in North-western Ontario. What animals, birds, reptiles, insects, fish and plant species thrive there? Design a posterboard project to display your investigations.

# Thinker

Read Over in a Forest: Come Take a Peek by Marianne Berkes. Discuss the type of plants and animals in the book and where in the world you'd find them.

Read <u>Dangerous Creatures of the Forests and Woodlands</u> by Helen Bateman and discuss where in the world they are found.

Using the notebook pages provided, write a report describing the characteristics of woodland and dry forest biomes.

# Feeler

Make a bracelet around your wrist with contact paper. Make sure the sticky side is facing outwards. While on your woodland walk, search for small natural items like seeds or feathers to decorate the bracelet with.

Use a camera, iPhone or iPad to snap photos of natural items on your walk that interest you to create a woodland collage on scrapbook paper. Include notes explaining why you snapped that picture. File your project in the portfolio.

Research Endangered Woodland or Dry Forest endangered animals around the world, then design a pamphlet describing the animals situation in their habitats and how they may be conserved.

# Intuitor

Investigate the food chain in a Boreal Forest by completing <u>this</u> activity and file it in your portfolio.

Choose a few activities from The Great
Outdoors | Woodlands | Explore Nature with Facts
and Activities by Lisa Regan to complete. Add the
projects to the portfolio.

Create a project describing the <u>Boreal or Taiga</u>
<u>Forest</u> and its contribution to climate stability.
Include the animals, plants and tree species, as well as any threats to deforestation.

# WHAT'S NEXT?

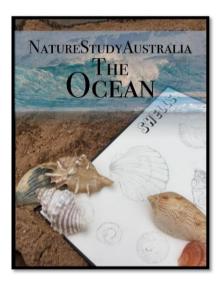
So! We have a brand new series of nature study guides which focus on the diverse biomes within Australia.

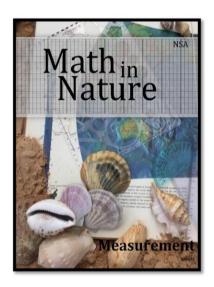
We've dived into the <u>ocean</u> to explore its depths, walked the <u>desert</u> to investigate outback creatures and investigated <u>dry forest and woodland</u> communities.

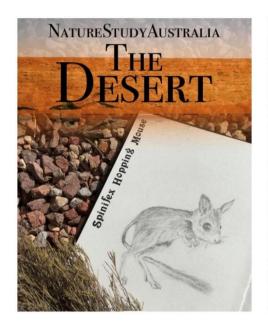
### So, what's next?

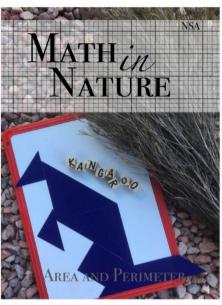
What is life like in freshwater environments? What fascinating creatures will we find while ponding?

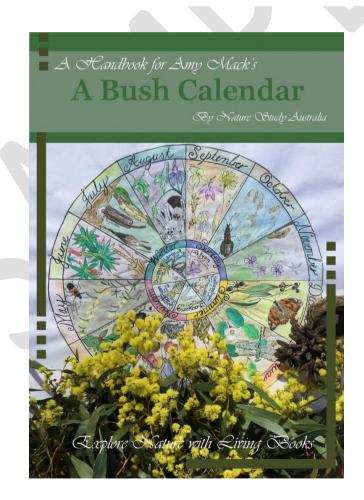
Each new nature guide in the biome series will be released with a companion math guide which focuses on one element of math which is aligned to the Australian curriculum. Each lesson focuses on learning math naturally as nature is explored outdoors.











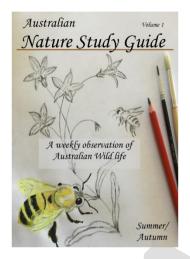
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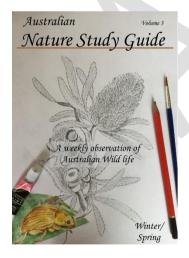
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