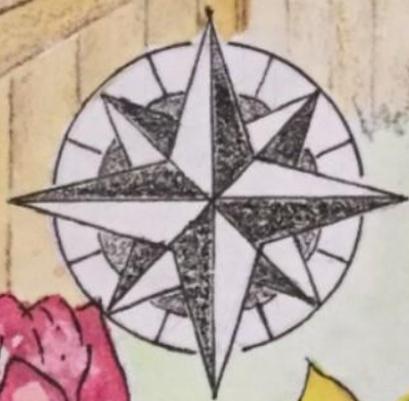
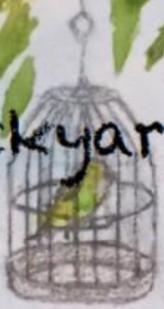


Australian Nature Study Guide

Backyard Edition



- Spring Flowers
- Pets - Budgerigars
- Direction
- Chickens
- Bugs
- Flies
- Scorpions
- Wasps
- St. Andrew Spiders
- Christmas Beetles

SPRING/
SUMMER



AUSTRALIAN
NATURE STUDY
GUIDEBOOK

Spring / Summer

Volume Eight

Backyard Edition

First Published by Marie Viljoen 2019

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About the Author

Marie Viljoen has been home educating for eleven years. She shares her life with her wonderful husband and lives on the land with four of her five children who delight in assisting dad. Two of her daughters have graduated and she's the grandparent of two **precious granddaughters** so far.



Marie Viljoen

In those rare moments when there's time to breath and cappuccinos and chocolate are bliss, she loves to read, bush walk and journal. Above all, she adores her Saviour and exploring His exquisite creation brings her joy while sharing the experience with her children. She's so excited for the opportunity to write and share nature discoveries with you.

Dedication:

To my children for their patience and support - Thank you for tagging along with me on my excursions and being patient when I linger too long. To my longsuffering husband - Thank you for giving me the time to chase my dreams and for not complaining when dinner is late. Again! To my special friend, Elizabeth - Thank you for your consistent encouragement and support. To my amazing friend Johanna - Thank you for simply believing in me, and for the motivation and inspiration you sprinkle in my life. I appreciate all you do. To my Creator - Thank you for giving me the 'eyes to see' Your marvellous creation.

A warm thank you to the photographers
who kindly contributed their photographs for this project.

Get in Touch!

It is my hope this guide will encourage you to marvel at the Aussie wildlife in your backyard and refresh your spirit as you explore and enjoy the gift of creation.

[Nature Science for Aussie families](#) is a F.B. Group where outdoor mamas share their adventures, explorations and activities to motivate, encourage and support one another. We'd love to have you [come along side us](#) and share in our joy of the outdoors.

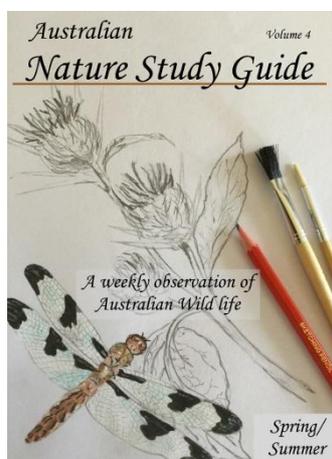
[Become a part of our email community](#) for additional support and free resources that'll enrich your nature study encounters by subscribing to our monthly Nature Study Journal [here](#).

Pop in and visit me at:

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[Facebook: Nature Study Australia](#)

[Nature Study Australia Forum](#)



I invite you to take a weekly walk through Australian wildlife with the

[Spring/Summer Nature Study Guide](#)

WELCOME NATURE ENTHUSIAST!

The Australian Nature Study Guidebook: Weekly Observations of Australian Wildlife was born out of a need to share nature with my children through the southern hemisphere's seasons. In the [Spring/Summer nature study guide](#), we observed parrots, searched for bats, explored the outdoors for caterpillars and butterflies while investigating cicadas. We also searched for dangerous spiders and learnt about dangerous snakes. It was a joy to observe the season while connecting with our unique Aussie wildlife.

Now, I invite you to slow down with me and explore nature in the backyard or park where we'll encounter common, but interesting and complex creatures living alongside us like chickens, budgerigars and scorpions. We'll learn interesting facts about the St. Andrew's Cross spider, flies and wasps. We'll enjoy exploring navigation and appreciate spring flowers while examining the differences between true bugs and beetles.

I encourage you to take a leisurely walk through this guide, pausing a while should a child be particularly interested and inspired to explore a little longer on a topic. A weekly theme can be extended into a month of adventure where the child is immersed into the secret worlds of nature and natural play.

I hope you'll be inspired to step outdoors with your family and enjoy making precious memories while following the seasonal transformations in the backyard.

As a Christian, my writing will be flavoured with a Christian worldview and as home educators, we have the liberty to take what we need from a resource and leave what we don't, so you have the freedom to tailor this guide to your unique family and personal beliefs. We all have the same goal in mind: to give our children an exceptional education fashioned to their own capabilities and interests.

The information included in this guide can be used by all home educators regardless of your preferred learning style. It is flexible and easily tailored to your preference whether it be Charlotte Mason, Unit Studies, Unschooling, Project-Based, Classical, Traditional, Montessori or Waldorf based.

This guide will encourage observation, exploration, adventure, discoveries, creations, research, writing, reading, drawing, painting, comparisons, discussions, wonder and much more. So, come along. Walk with me.

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STARTING OUT

“It is infinitely well worth the mother’s while to take some pains every day to secure, in the first place, that her children spend hours daily amongst rural and natural objects; and, in the second place, to infuse into them, or rather, to cherish in them, the love of investigation.” ~ Charlotte Mason

Let’s Get Started

This section will provide information on the topic being researched before you head out doors, so that you are equipped with the knowledge you need to answer questions when they’re fired at you. It is by no means exhaustive. Instead of reinventing the wheel, I’ll be referring you to helpful resources or links on the weeks theme if you’d like to research it further and dig deeper.

Nature Rambles

Nature rambling is a time to explore the backyard and notice which creatures are living amongst you or visiting for a season. Encourage children to investigate the yard for the subjects of your study and observe them; noticing their behaviour, habitat and feeding habits. Once discoveries have been made, the child is free to play or note their observations within a nature journal or by using the notebook pages provided with the guide.

Literature Jaunt

I’ve included a list of children’s books relevant to the theme of the week which will offer enjoyment and ignite excitement in the subject to be explored. Enjoy them by reading the stories outdoors if the weather permits or introduce them to your ‘circle time’ or ‘morning basket.’

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 to the facts related to the study. Also ensure your children have a firm grounding in the creation of the world by God as then they'll be able to perceive evolution's point of view on historical science.

Poetry Picnic

Reading poetry while enjoying a snack is so refreshing and I guarantee, that if the children aren't keen on poetry, they'll be there for refreshments. Pull out your blanket, and a snack to enjoy while reading the poems included in this section with your children. Due to copywrite laws, I haven't included the poems in the guide, but most of them can be found with an internet search. The poems can be used as copy work, either as handwriting practice or as an addition to their nature journal entry. They can also be used for dictation and memory work.

Picture Study

Picture study is a fun way to include art appreciation into your schedule. Children are exposed to wonderful works of art and ideas. The artworks can be found by using the internet in a quick search. Charlotte Mason's method of picture study is for the children to look at the picture intently, and for as long as they need and then answer these few questions:

- Ask them what they saw and expect them to describe it in as much detail as they can. Start with the youngest child so the older children are challenged to include more detail.
- What time of day is it?
- What season do you think it is?
- Is there a story to the picture or is it a scientific sketch?
- Do you like the picture? Why or why not?

Digging Deeper

In this section you'll find activities that will help the children to dig deeper into the nature study should they choose to. There are activities for research,

science, crafts, writing, art and much more. Allow the children to choose an activity that's most appealing to them unless you'd like to take a unit study approach and work on these assignments over a few weeks. I've included assignments to be enjoyed by a variety of ages. As families, we know it's important to enjoy the outdoors together, and as busy people, we can save time by integrating all ages into one study.

Consider Its Ways

We'll consider the ways of nature: the work of insects, the perseverance of plant life and the faith and contentedness of birds in an effort to learn how we can build character qualities to honour God and bless others. Proverbs 6:6-6 encourages us to, "Go to the ant, you sluggard; consider its ways and be wise." As we observe creation, we'll notice how God has wired each creature with instinct and initiative. We'll ponder its ways and become wise as we strive to build similar character qualities within ourselves that'll sustain us through life.

Notebook Pages

You'll find four notebook pages per study; two pages are designed specifically for the weekly topic, while the other two pages are generic, allowing you to use them for observations unrelated to the topic of the week. They have been designed by a friend to be a blessing to you.

The note booking pages can be placed in plastic sleeves and filed as a nature journal reference or you could paste the page in an inexpensive botany exercise book. The child could 'journal' on the blank page opposite the pasted notebook page. Keeping a record of the season's investigations and observations is a rewarding exercise and one that can be enjoyed for years to come.

You Can Do It!

You may be wondering how on earth you're going to fit nature study into your busy schedule? Here are a few ideas to consider:

- Integrate subjects.
- Include **all** children together as each one works at their own level.
- Set standard 'academic work' Monday through to Thursday, leaving Friday free for nature exploration, expression, activities and art.

- Spread a seasonal theme across the span of a month by **diving in** and **immersing the family** in a **single** topic. You may feel that one week is just not enough to enjoy the study and cover all you'd like to know about a subject. **So feel free to linger a while as there's no need to keep up to your neighbour's brisk walk.**
- Schedule nature study over the course of a week and **dip your toes** in like this:

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--|--|--------------------------|---------------|---|
| Introduction as read aloud in Let's Get Started. | Read stories related to the weeks theme. | Poetry and Picture Study | Nature Ramble | Nature Journaling or Activities & Consider its Ways |

Exploring the outdoors and creating fond memories with your children is a special opportunity which will nurture a love for all creation within their hearts as they glimpse at the magnitude of how big and awesome our God is.



Chickens

Let's Get Started

Chickens seem like simple creatures but they are surprisingly intelligent. Did you know that they have the ability to memorise about 100 human faces? [Studies](#) have also shown that chickens are able to solve problems and have a sense of mathematical reasoning. Apparently, they're not so dumb after all.



Image: Shelby Pietzsch

Plymouth Rock Chicken

Gallus gallus domesticus

Chickens are domesticated birds which are found in backyards as pets and egg layers or on commercial poultry farms being bred for meat or eggs. Meat chickens are called broilers and egg chickens are called layers. Chickens are either kept in coops and fed grain with proteins and minerals, or they free ranged and eat a variety of vegetation, insects and worms.

Chickens live together in flocks and they have complex social structures known as 'pecking orders.' Individual birds will dominate other chickens in the coop creating the 'pecking order.' These birds have priority over food and nesting locations. Disruption to the flock by removing or adding birds to the coop creates chaos until a new social structure is in place.

Do you know why roosters crow? Crowing sends a territorial warning to other roosters who may invade their space. They take care of their hens by sharing food. The rooster will cluck, pick up and drop grain to show the hens he found food for them. This process is called 'tidbitting.' Hens use this behaviour to encourage their chicks to feed as well.

Roosters initiate courtship with hens by dancing in a circle. The rooster will lower his wing closest to the hen to gain her attention. A hen will usually lay a clutch of 12 eggs in a nest before she becomes broody and decides to incubate the eggs. Eggs are incubated for 21 days before they hatch. A hen will hear the chicks peeping within the egg and she will cluck back, encouraging them to break through the shell. Hens are fierce protectors of their chicks.

A healthy chicken is able to lay 265 eggs a year. Some breeds lay over 300 eggs a year. It's important to keep hens well hydrated as a water deficiency will affect how well they lay eggs.

Did you know that there are more chickens than any other type of bird in the world? There are more chickens than people on the planet too.

Further Exploring

[Young Chicken Farmers](#) by Vickie Black

[A Kid's Guide to Keeping Chickens](#) by Melissa Caughey

Related Internet Links

[Chicken Facts for Kids | Kiddle](#)

[A Complete Beginners Guide to Keeping Chickens in the Backyard](#)

Nature Ramble

Observe chickens in your backyard, at a friend's place or on a chicken farm.

What odd behaviours are they showing? Notice if they swallow gravel. This helps them to digest their food. Why are they scratching the ground with their sharp claws? What do hens do after they've laid an egg? Do you notice the red, fleshy bits on top of the hens and roosters head? This is called a comb. Look at the flaps of skin hanging under the beak. These are called wattles. What are they eating?

I wonder which chicken is at the top of the 'pecking order.' Can you tell which bird is at the bottom of the social order? Are chickens able to see colours? Do they dream? Why do they bath in dust?

The pecking order of chickens reminds me of the magpie social structure. Such arrangements seem to create a sense of order and peace for their flocks.

Literature Jaunt

[Mellie's Chickens](#) by Brenda Williams

[Rosie's Walk](#) by Pat Hutchins | [Read Aloud](#)

Secrets of the Garden by Kathleen Weidner Zoehfeld

Sonya's Chickens by Phoebe Wahl

Sly the Fox and the Red Hen by Fran Hunia

Hattie and the Fox by Mem Fox | [Read Aloud](#)

The Chicken Little Fable | [Read Aloud](#)

Chickens | [Read Aloud](#)

Egg to Chicken by Grace Jones

Poetry Picnic

[The Chickens | Unknown](#)

Picture Study

[Rooster and Sunflower Mosaic Wall Art by Moziaco](#)

Consider Its Ways

As I consider the pecking order of chickens I'm reminded that God is a God of order. He created all things to flow harmoniously from the colonies of the smallest insect to the largest mammal; from the sun, moon and stars to the currents of the ocean. He orchestrates the rising and setting of the sun as each day begins with order. In the same way creation functions with order, our homes need order to run peacefully as well. Schedules and chore duties encourage a sense of peace and order within our homes as we follow them.

"Let all things be done decently and in order." 1 Corinthians 14:40

Digging Deeper

Young Students:

- Listen to the Little Red Hen fable [here](#). What can you learn from this story?
- Learn more about chickens [here](#).
- Watch a chicken egg hatch [here](#).

- Listen to [this](#) fun chicken song.
- Cuddle a chick. What do they feel like?
- Cook eggs and taste the egg white and yolk. How do they taste different?
- Create a hand painted hen [here](#). Get messy!
- Visit a local hatchery or poultry farm.
- Colour in the chicken notebook page.

Older Students:

- Research the history of the fable, 'Chicken Little.' What other names is the story known by?
- Watch the development of a chicken embryo [here](#).
- Dance along to the chicken dance [here](#).
- Learn to draw a chicken [here](#).
- Sketch the lifecycle of a chicken in your nature journal.
- Draw the anatomy of an egg in your nature journal.
- Learn to cook a roast chicken.
- Create a geometric chicken like [this](#).
- Chicks are virtually independent creatures. Compare their needs and activities to that of a newborn baby.
- Compare a rooster to the hen. How are they different?
- What animals or birds are the predators of chickens?
- Use the chicken notebook page to record your investigations.
- Why did the chicken cross the road?

Oldest Students:

- Research Avian Influenza or the 'Bird Flu' [here](#). Write a report with your research.
- Is the chicken egg the biggest cell? Find out [here](#).
- Learn to pencil sketch a chicken [here](#).
- What is alektorophobia?
- Use the notebook page to record your investigations.

New Biome Nature Unit Studies in 2020

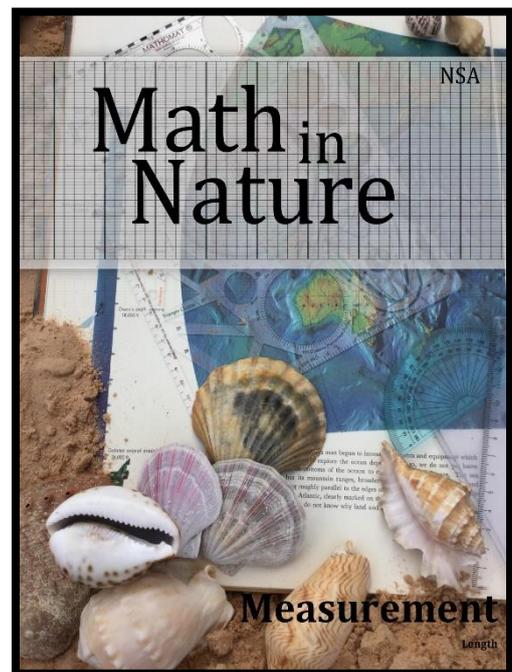
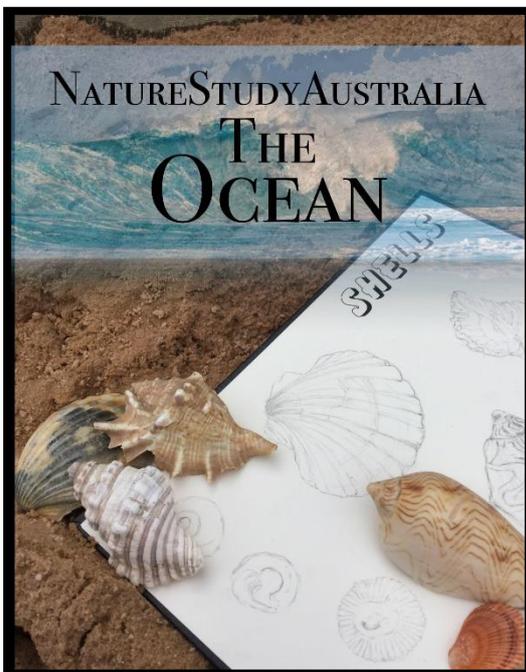
Join us for a brand new series of nature study investigations which focus on the diverse ecosystems within Australia.

We'll be discovering nature in coastal regions, life in the outback, treasures in the rainforest and fascinating creatures of the woodlands.

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

Introducing

The Ocean Unit Study & Math in Nature: Measurement



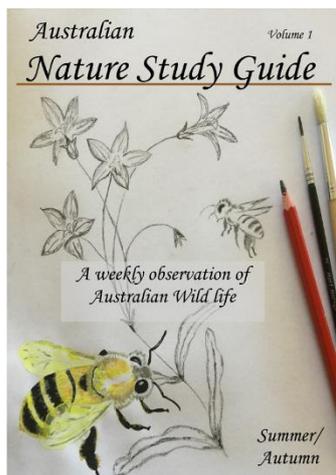
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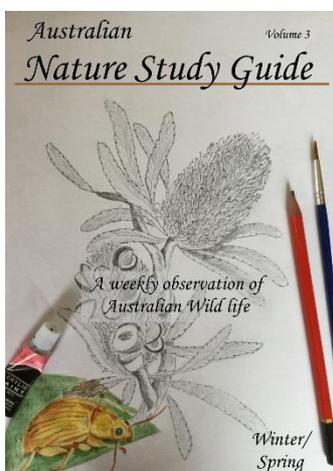
[Summer/Autumn | Volume 1](#)



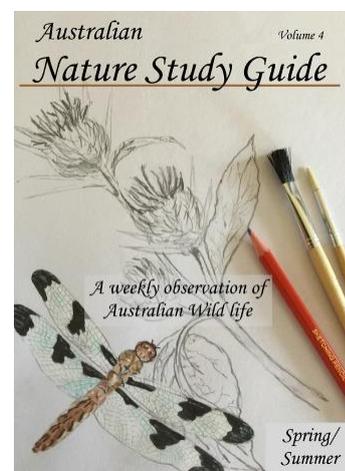
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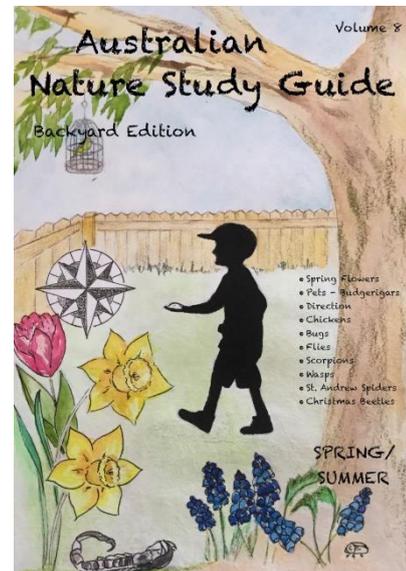
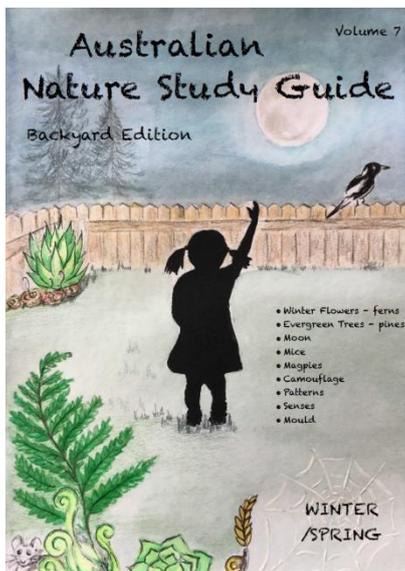
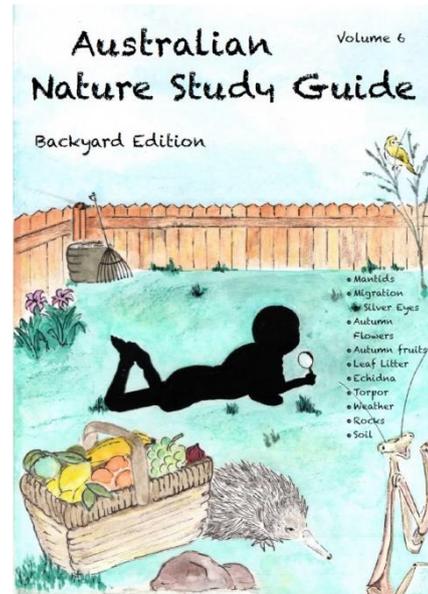


[Spring/Summer | Volume 4](#)



Summer/Autumn | Volume 5

Autumn/Winter | Volume 6



Winter/Spring | Volume 7

Spring/Summer | Volume 8

