

March 2019

Volume 2, Issue 2

Nature Study Australia



Inside this issue:

Seasonal Changes	1
Show & Tell	2
Inspired to Journal	6
Phenology Wheel Template & Photo Competition	8
Jacob's Adventure	9
A Neighbourhood Tree Study	10
Identification Challenge	11
Nature Watch Chart	12
A Tree Timeline	13
A Neighbourhood Tree Profile	14



**Leaf-curling Spider**

They protect themselves by hiding inside a silk seamed curled leaf. They are active during the day but you'll only see their feet sticking out.

**Seasonal Transformations Begin**

As we glide through the last days of summer, and slip into Autumn, let's be aware of the seasonal changes beginning to take place around us. We look forward to cooler, fresh mornings and evenings setting in, encouraging blankets of fog and exquisite sunrises.

Birds are moulting wing feathers in preparation for migration. Some birds in the east will flock north while those in the south start pre-migration flocking. Red Wattlebirds flock while honeyeaters invade River Red Gum flowers. Pied Currawongs descend from the mountains.

It's a great time to observe marsupials as they become more active in the cooler weather. If you have bandicoots visiting your backyard, look out for the young ones as they leave the mother's pouch. Red-necked pademelons also emerge from the pouch this month. The platypus can be seen in the creeks on overcast days. So sneak up on a platypus if they're in your area.

Berries are ripening like the Kangaroo Apple and Ruby Saltbush. Bush foods ripen like the Cluster Fig, Bush Tomato and the dunes provide tasty Sea Almonds. Broadleaf Teatree flowers attract fruit bats and acorns begin to fall.

The world of insects is still flourishing; black field crickets are moving, skipper butterflies, xenica butterflies and gum moths are all a flutter. Harlequin bugs are common in the garden and European wasps gather at water so be aware as they're the aggressive sort. Leaf-curling and Orb weaver spiders visit gardens too.

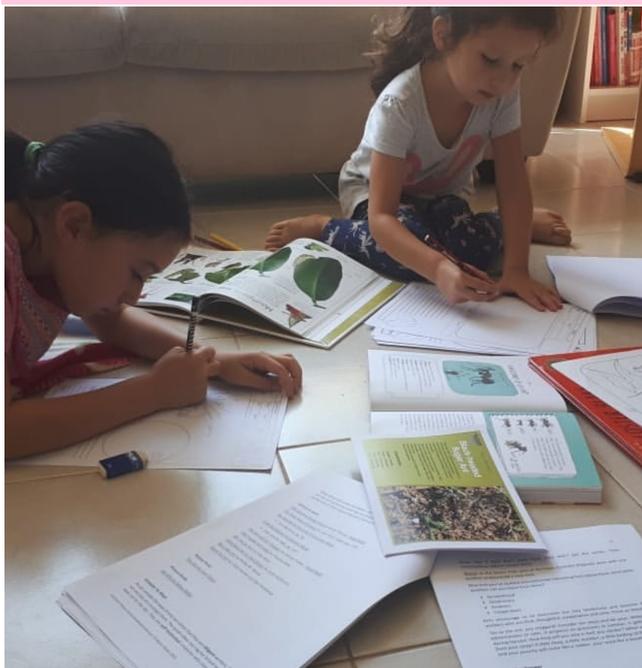
Deciduous tree leaves start to shut down by changing leaf colours to golden and burgundy hues. Make sure you're outdoors observing the remarkable seasonal changes. You don't want to miss it. Autumn is magical.

**Seasonal Links:**

- [Spring, Summer, Autumn and Winter— Why do we have seasons? | ABC](#)
- [Indigenous Weather Knowledge](#)
- [Indigenous Weather Descriptions](#)
- [Indigenous Seasonal Calendars](#)



# Show & Tell



Nini shares, 'I love the part, 'Consider its Ways,' in the nature study curriculum. We've been concentrating on how to bring ant character qualities into our home. Servanthood: 'I can help pack toys away even if I wasn't playing with them.' Helpfulness: 'I can help by folding the clothes, even if they're not mine.' Kindness: 'I try to say things that are kind.' Cooperation: 'I can try work together to get out the house on time.'"



Nini and family set out to pick blackberries in a country town. Nini shares, 'We spent six hours outside and it felt great. I spent hours picking and chatting with my 8 year old. So grateful for the time together and for nature that provides such sweet things for free.'

Find Nini @these\_fleeting\_years on Insta



Marlin creates a 'froggy snack.' after Frog Nature Week. Image by Elke

Find Elke @threadsofindigo on Insta

Find Sara @sara\_happiness.is.here on Insta



Sara's Miss 9 attended a Project Fair and presented her study about tadpoles and frogs. Sara shares, "She talked about where we got them, their life cycle, that we've been observing how to tell the difference between a frog and a toad and what species we think the frogs are. She read some facts from a book and made a model of how the frog uses its tongue to catch food."

# Show & Tell



Minette attended her first beekeeping workshop. When the bees within the hive were revealed it was noticed they'd made a bridge.

Joanna GI explains "that this behaviour is known as festooning which is not completely understood. It occurs during comb building or repair, measuring distance and increasing wax production. It has also been observed and postulated that it occurs to regulate the temperature of a hive."



Yevette finds an eastern brown snake in her garden which has died mysteriously. She's thinking about preserving it, but right now, it's in the freezer to make sure it's really, really dead.

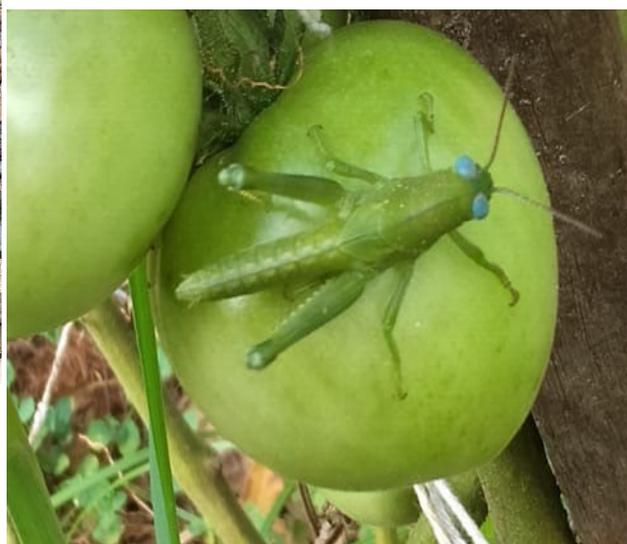
Nature Journal March 2019 © Marie Viljoen



Jacob's latest capture is that of the Blue-banded bee exploring his garden. Isn't it magnificent? He is spreading his wings to macro photography as well.



Sarah's pet snake laid eggs and they hatched recently. It was an exciting experience for the family.



Karen spotted a well camouflaged grasshopper on her tomato. Aren't those eyes stunning?  
Image by Karen

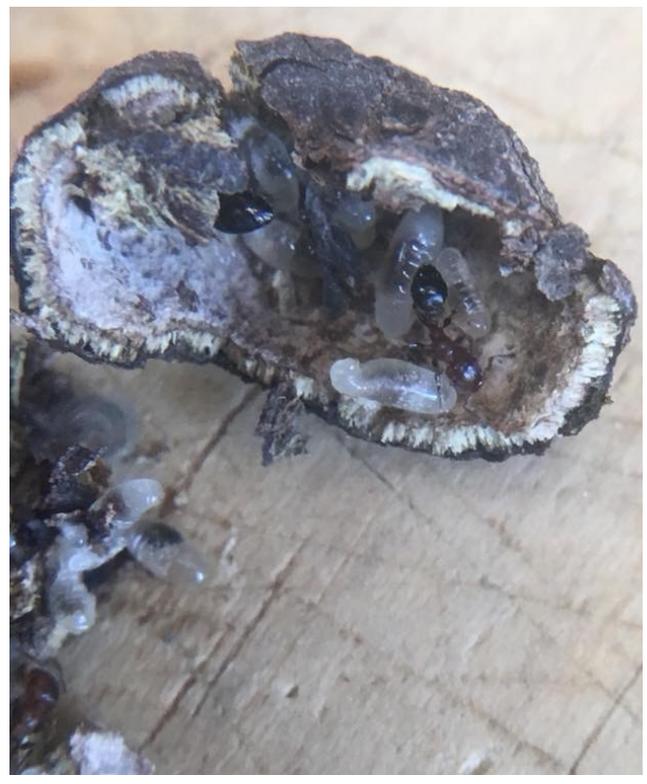
# Show & Tell



Natalie and Miss (nearly) 10 visit a butterfly house. What a lovely experience!



Anna and family study birds. Anna shares, "We went on a walk to search for Willy Wag-tails, collect pieces of nature to make our nests and enjoyed getting all hands in with painting...." Unfortunately, and quite surprisingly, a Willy Wag-tail was not found but other birds were observed.



Wendy, Cheryl and Jacob found ants in a symbiotic relationship with gall wasps inside a gall. It's an amazing find!



Kathryn found green shield bugs hatching in her garden. The family gathered them up to observe the various stages of their life cycle. They've been kept comfortably feeding on tomato plants.

*"People know they have to work out to get good at sports, yet they don't think they have to work out to get good at asking questions. If you pose questions regularly, you learn the right questions to ask, and you develop stamina in finding the answers to them. You can keep on rephrasing and reposing questions to an animal until it just gives up the answers. It's a great game." ~ Todd Newberry*

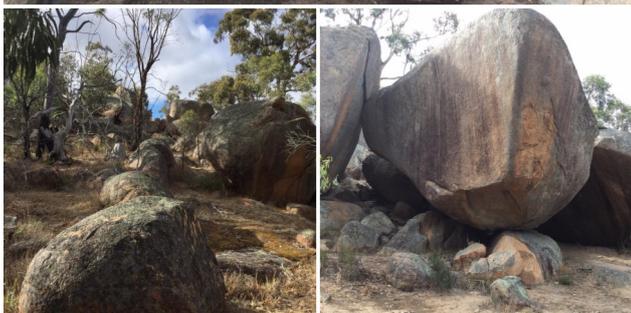
# Show & Tell



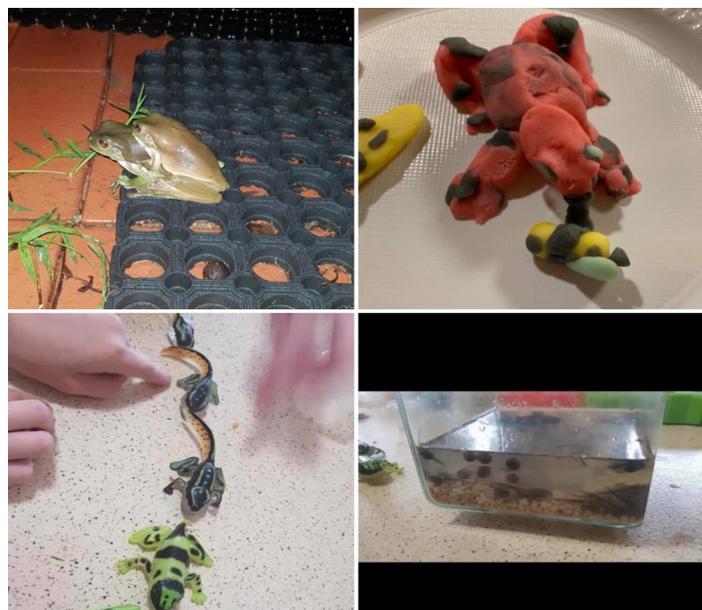
Jo and family observe lady beetles up close.



Rebecca was surprised to find a baker's dozen of peron tree frogs on her back verandah recently.



Jo and family set out on a field trip to observe Aboriginal art in the mountains.



Rachael and family are flooded with tadpoles and frogs. She shares, "we have been inundated with water in Townsville. Our backyard has become a breeding ground for every frog in Queensland. After watching the frogs slip in under the door, we discovered millions in the backyard. We've caught tadpoles and learnt how to identify them and toad poles and researched what to feed our little friends. We made play dough frogs and studied the life cycle. The children are loving this backyard learning adventure."



Elke's children (on the left) study the process of pollination and observe the differences between male and female flowers. Chilli captured her observations with a nature journal entry. Find Elke @threadsofindigo on Insta.



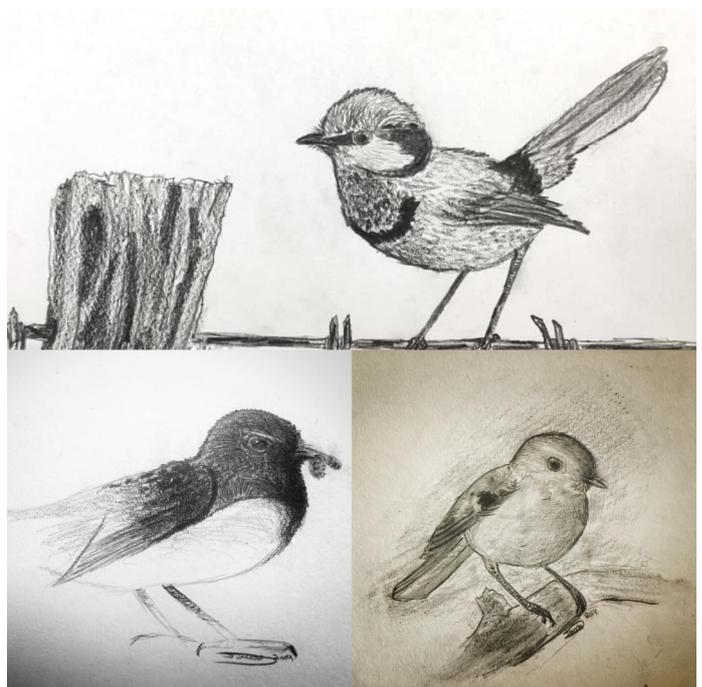
Chilli and Marlin are inspired to capture their bee observations in nature journals after learning how to revive a tired bee and the differences in life cycles between bumble and honey bees. They enjoyed creating a beautiful bee bath too.

Renelle shares, "We love to spot the different bees visiting our garden. We've had some big, bright, orange Teddy Bear Bees and some Blue-banded bees hanging around. Nature sciences and art are two of my favourite homeschool subjects."

Elke shares, "I'm really loving getting back to our afternoon nature studies together. It's such a great time of connection and togetherness in our school program which has two very different streams in it for an 11 and 6 year old.

This time in our day brings us together on the same level and it's lovely for the children to have this opportunity to work together. The Nature Study Australia program is a fantastic platform for local, interesting and inspiring units for each week in our own environment."

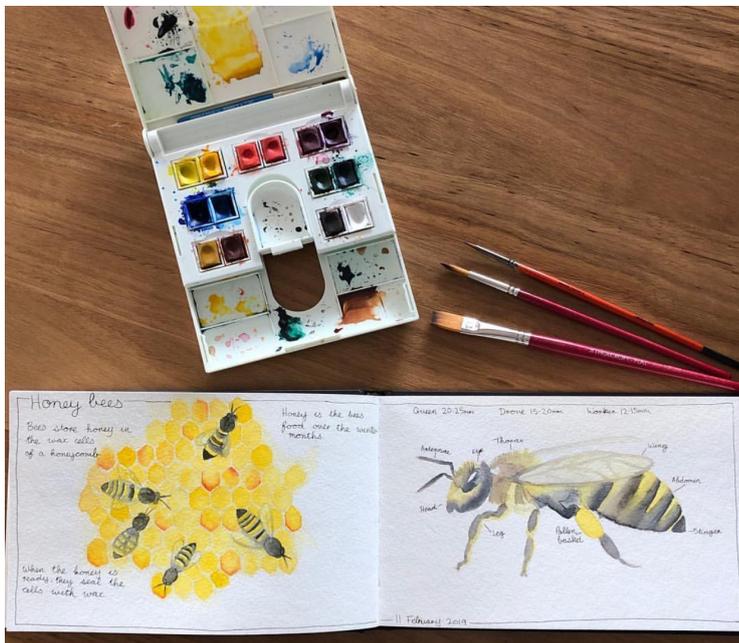
"No good field work can be reliable without a written record set down in the field. No record kept in the head, can be as accurate or precise as one in writing."  
~ Steven G. Herman



Jacob has been sketching birds and he's doing a great job. Top: Splendid Fairy Wren; Bottom Left: Willie Wag-tail; Bottom Right: Rose Robin



Tracey's son is capturing autumn leaves in his nature journal. Find Tracey @runwildheart



Teniele journaling honeybees. Thank you for sharing. Find Teniele @happiness.is.a.journey on Insta.



@wildwillowearthschool have started their nature studies with blue-tongue lizards and honeybees.



Teniele and family have studied honeybees, blue-tongue lizards and deciduous trees this past month.

"A notebook is the single most important piece of equipment a naturalist takes into the field. It is useful for recording daily observations, sketching plants and animals for later reference, taking notes on behaviour and habitat, and assisting in identification by recording field marks that might be forgotten. The notebook only increases in value as time goes by and observations accumulate. Soon, patterns begin to emerge from what initially may have been chance encounters with various plants and animals. A well kept notebook, that preserves a record of activities at a particular place over an extended period of time, can contribute information valuable to our understanding of nature."

~ Stephen Whitney

Jo and family wrap up their grasshopper study with nature journaling and colouring in the grasshopper notebook page.





## A Phenology Wheel Template for You



## Join us for our Annual Photography Competition

Jo created an A2 phenology wheel template for us.

Yeah! Download it [here](#). Thanks Jo! :)

NSA's Annual Photography Competition will begin 25th March and entries close 5th April 2019. Stay updated on FB & Insta.

Winners will be notified on 12th April 2019.

Eligible age groups are as follows:

- Wallabies 4-9years | Category: Mammals
- Wombats 10yrs—13yrs | Category: Arthropods
- Koalas 14-18yrs | Category: Birds

Competition is open to Australian Residents only.

Each competitor can enter up to three images.

Images will be posted within the Nature Science for Aussie FB Group or email to NSA. Images will be shared on social media and your privacy will be respected.



## Introducing the

## Backyard Edition

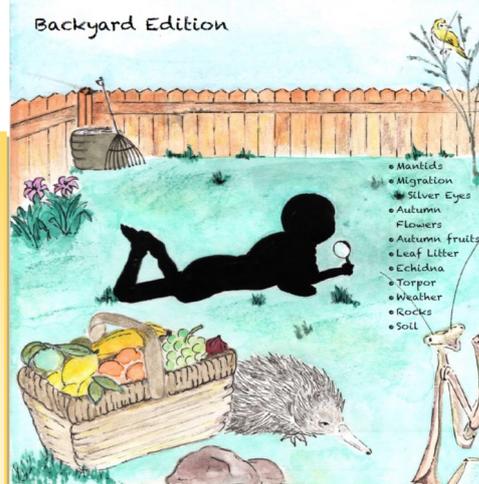
## Volume 6

## Coming Term 2 | 2019

## Australian Nature Study Guide

Volume 6

Backyard Edition



### Take a Squiz at NSA Articles:

[The Ecology of a Tree](#)

[Kangaroo Apple](#)

[Jacky Winter](#)

[Nature Study in the Backyard](#)

## Interested in Observing Birds?

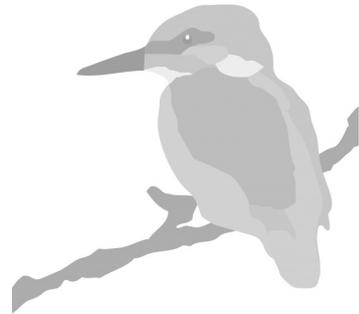
[Download](#) March 2018's Nature Journal for inspiration.

# Jacob's Adventure

## A RARE BIRD FIND

I often go out on outings with my local Birdlife group. Recently, we went to Violet Town in the foothills of the Strathbogie Ranges in Victoria. On our outings, we identify and record sightings, which help scientists. I, of course, like to photograph them as well. On this outing we saw:

- Sacred Kingfishers
- Dollar birds
- Blue Faced Honeyeaters
- Cormorants
- Superb Fairy Wrens
- Mistletoe Birds
- Rufous Whistler



*Jacob is an inspiring young man. He's taken his passion for photography and birds to create a Bird Field Guide for his local Bushland, [Cussen Park](#).*

*Visit his [website](#) and [Facebook Page](#), [Digital Journey Photography](#).*

But the most exciting sighting was of a group of 5 Grey Crowned Babblers which are classified as endangered in Victoria. There needs to be more than 3 babblers to be viable as a group. I found them after hearing their calls and tracked them.

The people who are in the group are helpful to me with identification of birds, if I happen to have a photograph of one I'm not sure of.

I will have a VERY exciting adventure to write about soon. The adventure won't be happening in Australia....but you'll find out next month.

Below are some photos of birds I sighted on our Birdlife outing.



Sacred Kingfisher

Image: Jacob Dedman



Grey Crowned Babbler

Image: Jacob Dedman



Female Rufous Whistler  
Image: Jacob Dedman

# A Neighbourhood Tree Study

Have you ever wondered past the trees in your neighbourhood or park and pondered what they were called? I have and I've decided to do something about my lack of knowledge concerning local tree species.

I've challenged myself to recognize and know the names of all the trees in my 'neighbourhood.' Charlotte Mason encouraged her students to identify all neighbourhood trees by differentiating the twigs in winter or the leaves in summer, and to describe accurately, from memory, or paint 6 of them. Will you join me?

Trees are one of the most visible features of our surroundings whether you're in the city or out in the country. The first thing we notice about a tree is the shape of the canopy. The canopy is the outline presented by the trees entire mass of leaves when seen from a distance. We are familiar with the pyramidal shape of the pine tree and the irregular shape of the eucalypt tree.

As we step closer to a tree, more features within the canopy become apparent. We notice leaf arrangements, shapes, margins and venation which are important features to observe when identifying trees. We'll note branching patterns that are quite specific for some tree types and the observation will aid in identification too.

When we step closer still, the bark becomes the most imposing thing before us and we notice bark textures and patterns. The size of the trunks vary among species and bear no relation to tree height. The girth of a tree indicates an estimated age and measured over time, we're able to work out a growth rate.

Make connections between the tree and its habitat by taking notes of the insects, birds and creatures which make it home or visit blooms in season. Compare tree habitats among different species.

## Fun Activities:

- **Measure the height and girth of each tree and observe them growing over time. Create a chart to show the growth rate over a few years.**
- **Make a bark print.**
- **Create leaf prints, leaf outlines or preserve leaves to make images of animals like [this](#). Create a leaf skeleton [here's how](#).**
- **Learn to sketch tree canopies by using Clare Walker Leslie's Guide to Sketching Trees [here](#).**
- **Learn to use a field guide to identify trees.**

## Read Aloud Story:

We Love Trees by Rossiti Aishah Rashidi | [Read Aloud](#)

## Tree Art:

[Blowing Away by Amy Giacomelli](#)

## Enjoy a Walkabout:

Over the course of a year, begin to observe and learn the identities of the trees in your neighbourhood by taking note of the key features used to identify trees like leaf shapes, arrangements, margins and venation.

## Let's Discuss:

- How trees give shade and shelter.
- How they provide food for humans and animals.
- All the reasons why we need trees.
- What trees need to grow.
- Tree parts.
- The life cycle of a tree.

## Get Creative:

Count and classify the trees in your neighbourhood environment. Are the trees:

- Large, medium or small?
- Deciduous or evergreen?
- Used for shade, screening or sound barriers?

Show the results with a bar or pie graph.

Draw a plan outlining the areas which need more trees.

Which kind of trees would you plant there and why?

## Celebrate National Eucalypt Day

23 March 2019

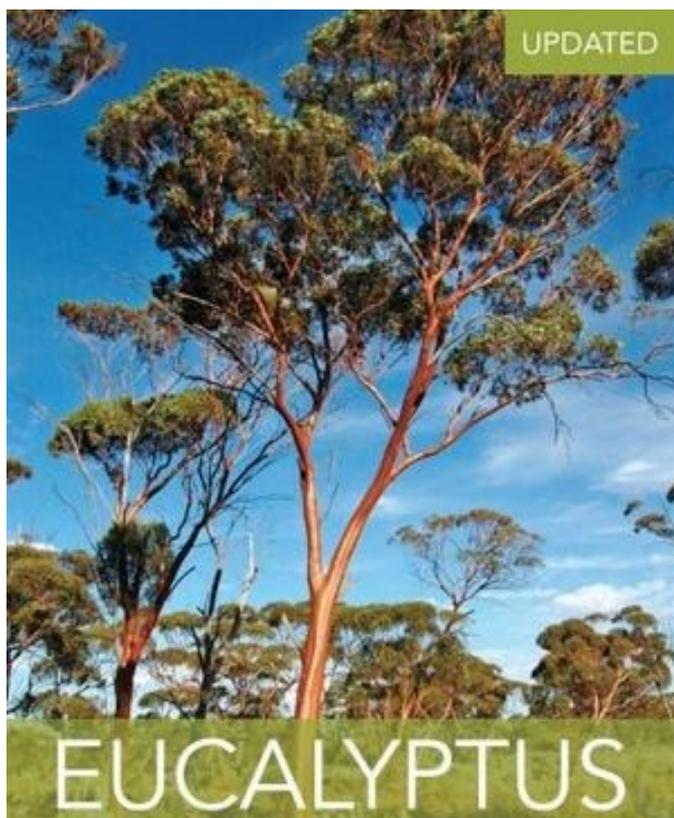
Each year, we celebrate Australia's beautiful eucalypts with National Eucalypt Day. This day sees groups from across Australia hold events to share their knowledge and love of these incredible trees. For 2019 events, head to [Eucalypt Australia](#)



### Identification Challenge

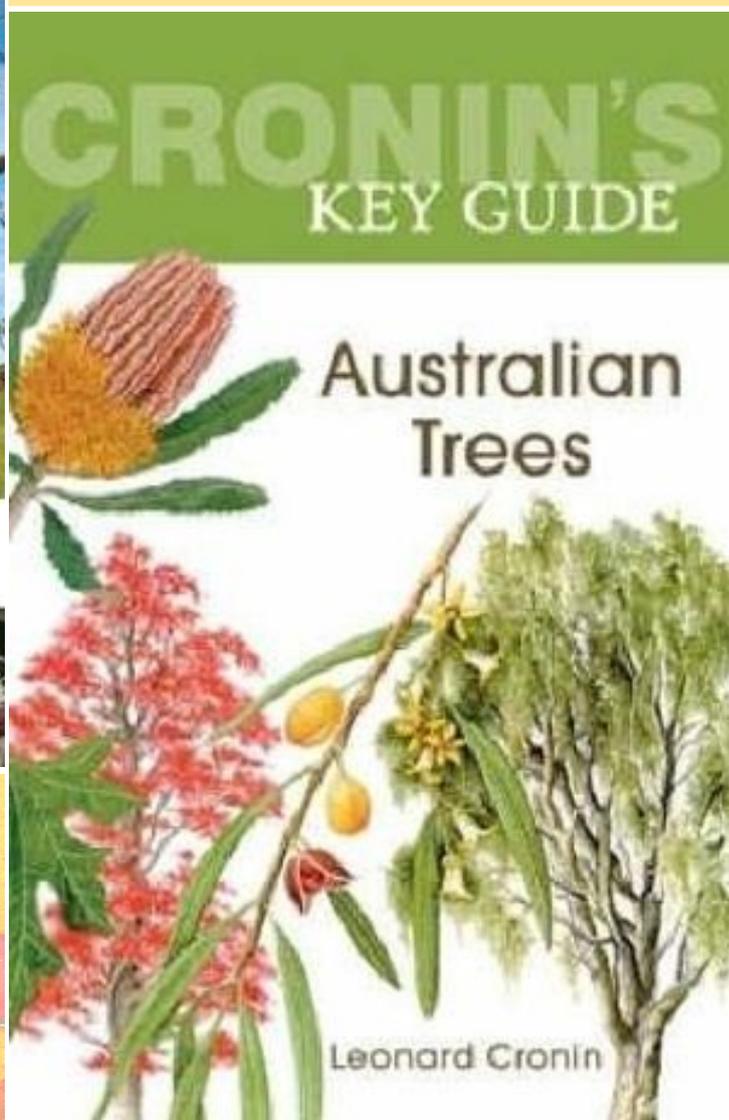
Which eucalypt tree do these flowers belong to? Let me know by email at:  
marie@naturestudyaustralia.com.au.

Who will be the first to guess and receive a colouring book by **Steve Parish**



## EUCALYPTUS

An Illustrated Guide to Identification  
IAN BROOKER & DAVID KLEINIG



Observe

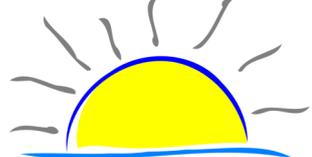
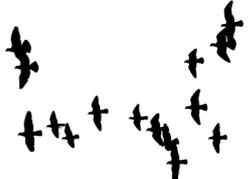
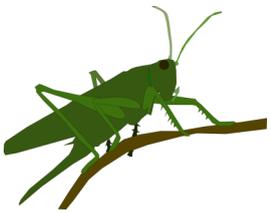
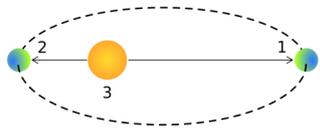
**Autumnal Equinox**

21st March 2019

[Understanding the Equinox and Solstice](#)

# March Nature Watch Chart

Use the simple ideas in this chart to encourage outdoor explorations.

<p>Are the mornings becoming cooler?</p> 	<p>Measure daylight as the days become shorter.</p> 	<p>Do you notice pre-migration flocking?</p> 	<p>Observe active marsupials.</p> 
 <p>Enjoy a bushwalk</p>	<p>Search for skipper butterflies.</p> 	 <p>Honeyeaters are in the gums. Can you hear them?</p>	<p>Find harlequin bugs.</p> 
 <p>Begin the neighbourhood tree identification challenge.</p>	<p>Collect acorns for the nature table.</p> 	 <p>Listen! Can you hear a cricket? Find one.</p>	<p>Visit a pond to observe ducks nesting.</p> 
<p>Catch a grasshopper.</p> 	<p>Spy on a gecko.</p> 	<p>Observe Autumnal Equinox 21st March.</p> 	<p>Go rock pooling to see cowfish and seahares washing up and laying egg strings.</p> 

## Watch for:

- Blackberries
- Baby pipefish
- Springtail Insects on ponds.
- Aquatic insect larvae emerging as adults.
- Canna lilies flowering.

## Investigate:

- Why we need trees.
- What are trees used to make.
- How do trees grow.
- How to plant a tree and take care of it.
- Tree Lifecycle.

## A Nature Journal Idea:

Take up the Neighbourhood Tree Challenge and learn to sketch tree shapes, leaves and bark. Clare Walker Lesley will guide you [here](#).

## A Challenge:

Join me for the Neighbourhood Tree Challenge and learn to identify trees in your area.



# A Neighbourhood Tree Profile

Tree	Leaf	Identification:
	Flower	Canopy:
	Fruit	Leaf Arrangement:
		Leaf Shape:
		Leaf Margin:
		Leaf Venation:
		Branching Pattern:
		Bark Type:
		Height Measurement:
		Girth Measurement:
		Flower Buds:
		Flowers:
		Seeds:
		Fruit:

<b>Date:</b>	<b>Time:</b>	<b>Place:</b>
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My Observations:-



# A Neighbourhood Tree Profile

Tree	Leaf
	Flower
	Fruit

Identification:	Canopy:	Leaf Shape/Colour:
Branching Pattern:	Bark Type:	Buds:
Flowers/Colour:	Fruit:	Seeds/Capsules:

Date:	Time:	Place:
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