



go  
slow  
for a  
mo'

NATURE WELLNESS TRAIL

## Randwick Sustainability Hub Teacher Pack

Nature is one of children's most valuable assets. Daily experiences within naturally rich environments can transform the way children learn, grow and live. By choosing learning and play environments that weave in opportunities to experience nature and the great outdoors, children will develop connections with nature that support a wonderful array of health, social, educational, and environmental benefits.

*"Time in nature is not leisure time; it's an essential investment in our children's health (and also, by the way, in our own)."*

**Richard Louv,**  
Last Child in the Woods

### Nature's benefits



Improve learning, creativity, sustained attention & child development



Improve blood pressure, pain control, immune function, diabetes & allergies



Reduce stress, depression and anxiety & increase resilience



Enhance feelings of gratitude and care for ourselves & our community



Improve sleep, happiness, wellbeing & life satisfaction



Respect & appreciate our natural places

# Go Slow for a Mo' Trail

## Randwick Sustainability Hub

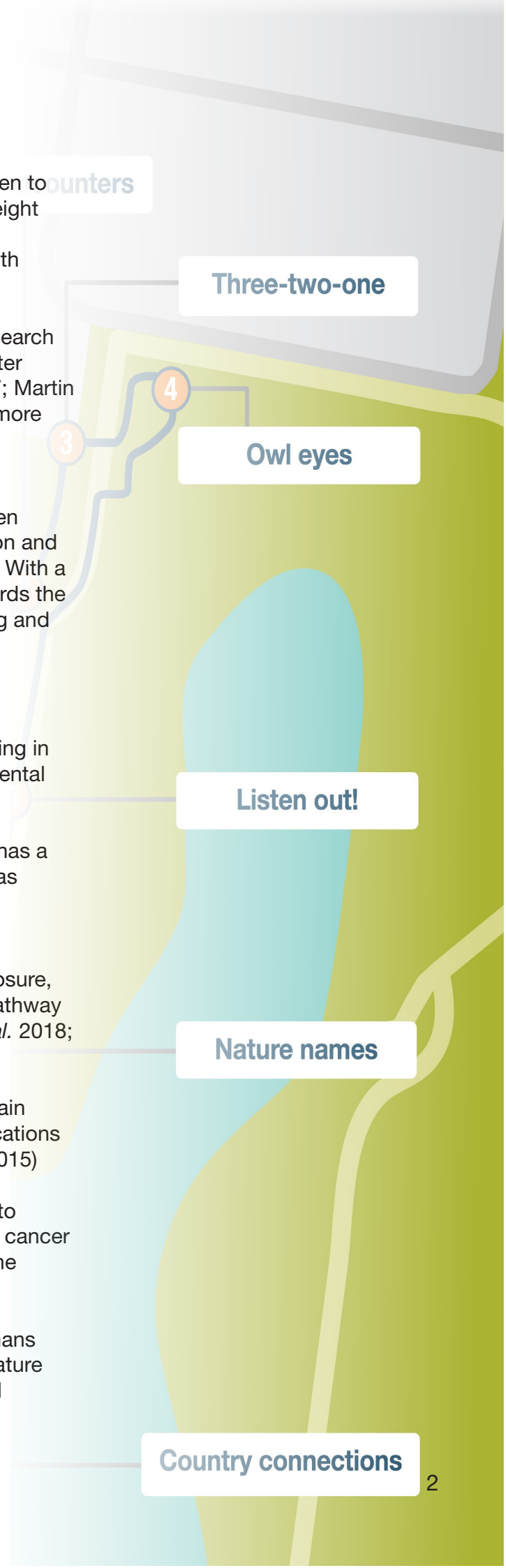
The Go Slow for a Mo' trail has been designed for children to enjoy meaningful moments in nature. The trail includes eight short sensory outdoor exercises and games known to improve wellbeing while forging stronger connections with nature.

To access nature's health and sustainability benefits, research shows that the types of activities we do with nature matter more than the amount of time spent (Frunkim *et al.* 2017; Martin *et al.* 2020). The more meaningful the moments are the more profound the benefits received.

Although the exercises may appear simple, they are not simplistic. Each exercise and the flow of the trail has been carefully researched. The trail starts by creating relaxation and creating curiosity and awe while opening up the senses. With a heightened level of awareness, the mimicry games towards the end of the trail build a greater connection, understanding and empathy for nature.

The trail uses the following theories:

- **Attention Restoration Theory:** ART proposes that being in and looking at nature allows the brain to recover from mental fatigue and restore attentional focus. (Kaplan 1995)
- **Stress Reduction Theory:** SRT proposes that nature has a wellbeing benefit through its stress reducing properties as measured by biomedical tests including cortisol, blood pressure etc. (Ulrich 1991)
- **Emotion & Nervous System Regulation:** Nature exposure, and nature connection in particular, is an evolutionary pathway to affect regulation. (Richardson *et al.* 2016; Korpela *et al.* 2018; McEwan *et al.* 2019)
- **Environmental Condition:** Natural environments contain chemical and biological agents with known health implications such as Phytoncides, Soil Bacteria and Sunlight. (Kuo 2015)
- **Physiological Changes/ Immune system:** Exposure to nature is related to increased DHEA, adiponectin, anti cancer T-cells and other factors. Some suggest a central immune system pathway for all benefits. (Kotera *et al.* 2020)
- **Biophilia:** The biophilia hypothesis proposed that humans possess an innate tendency to seek connections with nature and other forms of life. When we align with these natural tendencies we function better. (Li 2018; Ulrich 1993).





# Benefits for children

## 1. Enhance individual learning capability

Spending time in nature enhances educational outcomes by improving academic performance, focus, behaviour and love for learning.

The Go Slow for a Mo' trail is designed to decrease stress and increase attention restoration, to ultimately improve overall learning capacity and performance. Learning in natural environments helps to boost performance in reading, writing, maths science and social studies (Lieberman *et al.* 1998; Chawla 2015; Williams & Dixon 2013; Soboko *et al.* 2020). Nature-based environments enhance creativity, critical thinking, problem solving and improve attention restoration and focus (Taylor & Kuo 2008; Mårtensson 2009). Increased engagement, exploration and discovery through outdoor experiences help to promote motivation to learn (Rios & Brewer 2014).

## 2. Increase applied learning opportunities

The Go Slow for a Mo' trail provides a hands-on engagement, experiential learning and teaching platform. For children and young people, experiential learning enables them to follow their own ideas and work through problems as they arise. They can learn assertiveness, social skills, ways of leading situations and how to resolve conflict and will be able to use these skills in later life.

The trail exercises enrich learning experiences through:

- **Managing risks** - exploring shrubbery, balancing on logs and rocks and physically engaging with the natural environment improves motor and cognitive skills whilst learning to distinguish the difference between perceived and real dangers.
- **Engaging with their senses** - seeing a flower change from bud to full bloom, hearing cicadas call on a hot day, smelling nectar laden eucalypt flowers, feeling the cool freshness of the wind or the warmth of sun on the face; all offer the ultimate sensory experiences to a growing child.
- **Developing emotional intelligence** - during nature play, children learn to manage their emotions. Whether addressing fear, developing confidence or developing a sense of place and belonging - nature is the ideal teacher.
- **Improving social skills** - children learn how to negotiate, compromise and navigate problem solving with others. Nature play involves constant communication where children learn how to become flexible and stand up for their own needs and the needs of others.
- **Improving empathy** - mimicking nature triggers mirror neurons that increases understanding, empathy and compassion for nature. It also helps to create a stronger connection between nature and place.



Location of Listen out! station - tuning into nature sounds for health benefits

### 3. Provides a new sustainability education paradigm

Meaningful, positive experiences in nature guide children, youth and adults alike toward care for nature. There are increasing calls for a greater emphasis on (re)connecting people with nature to leverage and foster improved sustainability outcomes and conservation behaviours. Children who are connected to nature have better health, higher satisfaction with life, and increased pro-environment behaviours (Richardson *et al.* 2016; D'Amore 2015). Recent studies of children (aged 9-12) revealed significant associations between nature connectedness and the determinants of sustainable behaviour such as altruism, equity, frugality, and pro-ecological actions (Barrera-Hernández 2020).

Stark results examining the effectiveness of environmental education working with 250 children aged between 9-11, concluded that the level of children's environmental knowledge accounted for only 2% of the variance in their ecological behaviour, whereas nature connectedness accounted for 69% (Otto & Pensini 2017). Where time in nature during childhood and role models who care for nature being the two biggest factors that contribute to environmental stewardship in adulthood (Chawla & Derr 2012; Chawla & Cushing 2007).

## Go-Slow stations designed for children



#### Station 1:

Five big breaths (2-3 minutes)

#### Station 2:

Leafy encounters (2-4 minutes)

#### Station 3:

Three-two-one (2-3 minutes)

#### Station 4:

Owl eyes (3-5 minutes)

#### Station 5:

Listen out! (3-5 minutes)

#### Station 6:

Nature names (as little or long as you like)

#### Station 7:

Finding homes (2-4 minutes)

#### Station 8:

Country connections (2-4 minutes)

### **Station 1: Five big breaths**

This five-finger breathing exercise is a mindfulness technique that teaches children how to pause and use their fingers to take five deep breaths. Practicing slow breathing techniques have been shown to increase relaxation, sleep quality, and alertness and reduces symptoms of anxiety and stress. It allows children to process big emotions, connect to the present moment and feel comfortable and grounded. Being relaxed is also a precursor to increasing nature connection.

### **Station 2: Leafy encounters**

This exercise encourages inquisitive interactions with nature through exploratory play. Inviting participants to gently look under the leaves at five different locations and at different heights. For children and adults alike, curiosity has been linked with psychological, emotional, social, and even health benefits. Curious people are happier. Curiosity boosts achievement, expands empathy, and strengthens relationships between people and place.

### **Station 3: Three-two-one**

This is a grounding exercise that is designed to help use three senses (sight, touch and smell) and have fun while doing it. When we use all our senses, we notice a lot more of our surroundings. This exercise can also be used anytime to help children relax when they are feeling nervous or anxious. Getting out of sensory ruts is a powerful way to increase connection with a range of associated wellbeing metrics.

### **Station 4: Owl eyes**

This fun exercise activates children's wide-angle vision (peripheral vision) to see more movement around them and feel more aware. Wide-angle vision being how we are normally supposed to see, but television, books, and computer screens have made our field of view narrower. This exercise also triggers the parasympathetic nervous system, the part of our brain that helps us to relax.

### **Station 5: Listen out!**

This listening exercise tunes users into the range of natural sounds surrounding them while also facilitating a placemaking element. Tuning into nature sounds (as opposed to urban sounds) decreases stress levels and restores attention and focus. Sounds that create a feeling of getting to know and building a connection with place is proven to increase wellbeing, vitality and life satisfaction. Noticing bird sounds in particular has been shown to improve wellbeing.

### **Station 6: Nature names game**

This nature charade game is a mimicry game used to trigger mirror neurons to increase understanding, empathy and compassion for nature. It also helps to create a stronger connection with place. There are 12 nature names to choose from. See nature names for a detailed overview on how the game works (page 6).

### **Station 7: Finding homes**

This exercise draws together mimicry and exploratory play where children select a nature name and find a location in garden where they think they belong. It is designed to increase children's understanding, empathy and compassion for that specific nature but also how it interacts with the broader environment. Through this process stronger connection between them, the place and needs of nature are forged.

### **Station 8: Country connections**

This exercise introduces the Dharawal language of the Indigenous people of this country. Aboriginal and Torres Strait languages are not just a means of communication, they express knowledge about everything. Each language is associated with an area of land and has a deep spiritual significance, and it is through these languages that Indigenous nations maintain their connection with their ancestors and the land. Some of the sounds of Dharawal are not present in English, listen to the audio and have fun learning to pronounce the words.



# Nature names game

This nature name charade game is a fun way to get moving, use your imagination and learn about the natural environment.

\* Ages 2-100

\* Group size 2-20

This game is like charades. You have to act out your nature name and the rest of the group has to guess what it is. The first person to guess gets the next turn.

## Step 1: Discover your nature name

Spin the wheel to discover your nature name.

Think about your animal's most obvious features, senses, and movement or behaviour. Do some research if you need to. Start by looking at the journal page for each nature name provided in this teacher pack (pages 7-18).

## Step 2: Act out your nature name

The first person stands in front of the group and acts out the nature name without talking. Everyone tries to guess the answer. Really try and imagine you are the animal as it will help the guessers.

If no one is able to guess what you are, you can try and make sounds.

## Step 3: Add a style (additional option)

For extra fun you can try add in your nature style as well e.g. "Smelly" "Turtle"



### Nature names

- \* Blue-Banded Bee
- \* Blue-Tongue Lizard
- \* Brushtail Possum
- \* Bull Ant
- \* Common Sydney Octopus
- \* Eucalypt tree
- \* Giant Burrowing Frog
- \* Grey-Headed Flying Fox Bat
- \* Powerful Owl
- \* Snake-Necked Turtle
- \* Willie Wagtail
- \* Yellow-Tail Cockatoo

### Style descriptors

- \* Beautiful
- \* Confused
- \* Disgusted
- \* Energetic
- \* Fast
- \* Majestic
- \* Noisy
- \* Sad
- \* Sleepy
- \* Slow
- \* Smelly
- \* Surprised

# Blue-Banded Bee

*Amegilla*

## What do they look like?

Blue-Banded Bees are amongst our most beautiful Australian native bees. There are eleven species of described Blue-Banded Bees in Australia ranging in size from 8-14 mm. They have thick, reddish-brown fur on their thorax (chest area) and bands of metallic blue fur across their black abdomens. Males have five stripes and females have four. Their faces have yellow, cream or white markings.

## How do they move and behave?

Blue-Banded Bees fly to and forage on a variety of exotic and native flowers. Blue-Banded Bees are one of a few native Australian Bee species that perform a particular type of pollination known as 'buzz pollination'. These Bees will grab onto the flower, and shake their entire bodies rapidly, causing both the flower and its anthers to vibrate. This shaking movement causes the pollen to be dislodged from the anther, and then be collected by the Bee.

## What sound do they make?

The Blue-Banded Bees create a loud buzz. This is their super-power in action as they buzz-pollinate, using a rapid vibration to shake pollen from flowers.

## Where do they live and what do they need to survive?

They are widely distributed across Australia excluding Tasmania. They are solitary but usually live within close range to other Blue-Banded Bees. Females build their own nest and are attracted to areas where other females are nesting. Nests are built in soft mortar, mud bricks or soft sandstone banks in sheltered positions. Male Blue-Banded Bees roost together in small groups at night, out in the open, hanging onto twigs or stems. They vigorously shake their legs and wiggle their abdomens when a new Bee arrives to settle.





# Blue-Tongue Lizard

*Tiliqua scincoides*

## What do they look like?

The Blue-Tongue Lizard is silvery-grey with broad dark brown or blackish bands across the back and tail. Individuals on the coast usually have a black stripe between the eye and the ear which may extend along the side of the neck. The Blue-Tongue can grow to almost 60 cm in total length, of which about 36 cm is head and body.

## How do they move and behave?

Early in the morning Blue-Tongues emerge to bask in sunny areas before foraging for food during the warmer parts of the day. Like all lizards, Blue-Tongues do not produce their own body heat, and rely on the warmth of their surroundings to raise their body temperature. During cold weather they remain inactive, buried deep in their shelter sites, but on sunny days they may emerge to bask.

When threatened, Blue-Tongues turn towards the threat, open their mouth wide and stick out their broad blue tongue that contrasts vividly with the pink mouth. This display, together with the large size of the head, may frighten off predators. Bright colours in nature can often mean danger or poison.

## What sound do they make?

When threatened Blue-Tongues can give a loud hiss and flatten out their body to look bigger.

## Where do they live and what do they need to survive?

The Blue-Tongue Lizard occurs throughout much of New South Wales. They eat a wide variety of both plants and animals. Blue-Tongues are not very agile with short stumpy legs and the animals they eat are mostly slow-moving. Their teeth are large and they have strong jaw muscles so they can crush snail shells and beetles.





# Brushtail Possum

*Trichosurus vulpecula*

## What do they look like?

Black fur is seen around the eyes, nose and sometimes along centre of forehead. Its belly is pale grey to yellowish or white. Brushtail Possums have black oval shaped ears with white tips. Their tail is black and bushy, but sparsely furred or even naked underneath and at the tip. The Brushtail Possum's head and body length is 35-55 cm and its tail is from 25-40 cm long. It weighs between 1.2 - 4.5 kilos.

## How do they move and behave?

The Brushtail Possum is largely arboreal, living in trees and is nocturnal. It has a mostly solitary lifestyle, and individuals keep their distance from each other. Brushtail Possums are usually not aggressive towards each other and usually just stare with erect ears. They have two thumbs on their front feet to help them climb. They have a hand-like back foot which also enables them to grasp on to branches with all four limbs for climbing, as well as sharp claws and a strong, flexible tail for curling around branches.

## What sound do they make?

They vocalise with clicks, grunts, hisses, alarm chatters, guttural coughs, and screeching.

## Where do they live and what do they need to survive?

Brushtail Possums usually make their dens in natural places such as tree hollows and caves, but also use spaces in the roofs of houses. They have strong teeth and often use their front paws to hold their food while eating. They prefer Eucalyptus leaves, but also eat flowers, shoots, fruits, and seeds. They may also consume animal matter such as insects, birds' eggs and chicks, and other small vertebrates.



# Bull Ant

*Myrmecia*

## What do they look like?

Bull Ants are large, alert ants that can grow up to 40 mm. They have characteristic large eyes and long, slender mandibles and a potent venom-loaded sting. They have superior vision, and are able to track and follow intruders from a distance of 1 metre. Many species of Bull Ants have bright red or orange colours on the head or abdomen.

## How do they move and behave?

There are about 90 species of Bull Ants in Australia with diverse behaviours and life cycles. Nine Bull Ant species have been recorded in Sydney, but there may be more as yet undiscovered. Some of the smaller species are known as Jumper Ants after their habit of aggressively jumping toward intruders. Bull Ants deliver painful stings by gripping the intruder with their mandibles (jaws), curling their abdomen to reveal the sting and injecting the victim with venom. Often multiple stings are delivered.

## What sound do they make?

Ants communicate using chemical signals called pheromones and specialised chirping sounds.

## Where do they live and what do they need to survive?

Bull Ants collect nectar and other plant juices, as well as animal prey, which are carried back to the nest. Bull Ant nests are usually underground and often have hidden or small entrances. The nests can extend several metres below the ground. They attack intruders of any size that come too close to their nest.





# Common Sydney Octopus

## *Octopus tetricus*

### **What do they look like?**

The Common Sydney Octopus is normally coloured grey to mottled brown with rufous coloured arms that taper towards the tip. Their eyes are typically white in colour, and the skin has many small regular shaped patches and large warty structures which are used by the octopus to make it look spiky and camouflage itself as seaweed.

The adult's body can be up to 80cm with an arm span to two metres! They have eight limbs, two eyes, and a beak for crushing shells.

### **How do they move and behave?**

The Sydney Octopus can swim and walk over the sea floor. They swim by using jet propulsion where they suck water into their body, then quickly contract their muscles to force the water out through a narrow funnel, aiming the water to steer in a particular direction. Octopuses normally travel along the sea floor using all or many of their eight arms in a sort of crawl.

### **What sound do they make?**

The Sydney Octopus is a silent hunter. They use their limbs to communicate. Their eight arms may allow for very expressive body language!

### **Where do they live and what do they need to survive?**

The Sydney Octopus lives on their own in the intertidal zone along rocky shores and in the ocean. The Octopus is a territorial animal that sits out the day in a lair among rocks and rubble. They generally hunt at night feeding on crabs, clams, snails, small fish, and even other Octopuses. They pounce on their prey, wrap their arms around them and penetrate hard-shelled prey with their beaks.





# Eucalypt Tree

## *Eucalyptus*

### What do they look like?

Eucalyptus is a genus of over seven hundred species of flowering trees, shrubs or mallees in the myrtle family, Myrtaceae. Trees usually have a single main stem or trunk and are part of the tallest known flowering plant on Earth (*Eucalyptus regnans*, known variously as mountain ash, swamp gum, or stringy gum). They grow from 10m up to over 60m. They have a range of bark types including:

- Stringybark: long fibres pulled off in long pieces, usually thick with a spongy texture
- Ironbark: hard, rough, and deeply furrowed with a dark red or even black colour
- Tessellated: bark is broken up into many distinct corkish flakes
- Box: has short fibres, some also show tessellation
- Ribbon: bark comes off in long, thin pieces, but is still loosely attached in some places

### Where do they live?

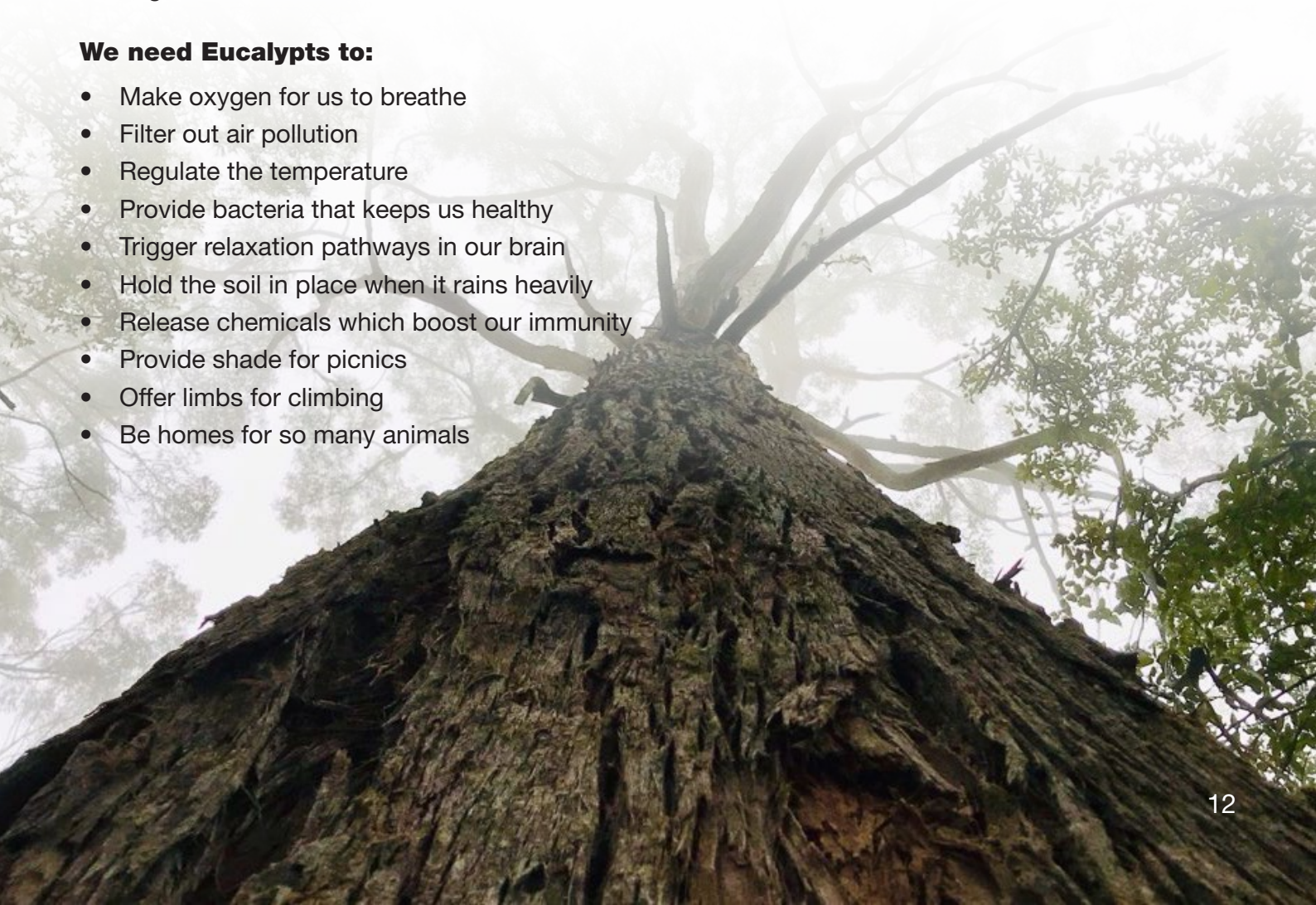
Most species of Eucalyptus are native to Australia, and every state and territory has representative species. About three-quarters of Australian forests are Eucalypt forests. Wildfire is a feature of the Australian landscape and many Eucalypt species are adapted to fire, and resprout after fire or have seeds which survive fire.

### What sound do they make?

You can often hear the soft creak of rubbing branches or the swoosh when the wind hits the canopy making the branches move.

### We need Eucalypts to:

- Make oxygen for us to breathe
- Filter out air pollution
- Regulate the temperature
- Provide bacteria that keeps us healthy
- Trigger relaxation pathways in our brain
- Hold the soil in place when it rains heavily
- Release chemicals which boost our immunity
- Provide shade for picnics
- Offer limbs for climbing
- Be homes for so many animals





# Giant Burrowing Frog

*Heleioporus australiacus*

## What do they look like?

The Giant Burrowing Frog is a large species of Frog reaching up to 10 cm in body length. It has a dark brown, grey or black back, and the sides are spotted with bright yellow. The belly is white or bluish-white, and the throat is grey with pale pink. The pupil is vertical and the iris is silver-grey. Fingers are webbed and toes are slightly webbed, both without discs. Adult males have large black spines on their fingers during the breeding season. This species is listed as “Vulnerable” in NSW.

## How do they move and behave?

This is a slow moving Frog and is often mistaken for the introduced Cane Toad because of its large size and bumpy skin; however, Cane Toads do not have vertical irises. Individual Frogs occupy a series of burrow sites, some of which are used repeatedly. Burrowing Frogs back legs are equipped with “shovels” which they use to dig themselves backwards down into the ground. This Frog is a slow growing and long-lived species, living up to 10 years of age, possibly longer.

## What sound do they make?

Males call from within or adjacent to breeding sites with a low pitched and plaintiff, owl-like oop oop oop in rapid succession.

## Where do they live and what do they need to survive?

The Giant Burrowing Frog spends more than 95% of its time in non-breeding habitat up to 300 m from breeding sites. Whilst in non-breeding habitat it burrows below the soil surface or in the leaf litter. Individuals move into the breeding site either immediately before or following heavy rain and occupy these sites for up to 10 days. They have a generalist diet and studies to date indicate that they eat mainly invertebrates including ants, beetles, cockroaches, spiders, centipedes and scorpions.





# Grey-Headed Flying Fox

*Pteropus poliocephalus*

## What do they look like?

The Grey-Headed Flying Fox is the largest bat in Australia. Their overall colour is a dark-grey body with a light-grey head, separated by a reddish-brown collar. The fur on the body is long and streaked with grey, the broad and well defined collar completely encircles the neck with hair that is golden orange in tone. Adults may have a wingspan reaching one metre in length and be up to one kilogram in weight. The Flying Fox wings have evolved from their hands, with a thin membrane of skin stretched between each finger. This species is listed as “Vulnerable”.

## How do they move and behave?

Flying Foxes sleep in trees during the day in large roots or ‘camps’ of up to tens of thousands of individuals. They hang upside down to sleep, but have to turn up the other way to go to the toilet. Around dusk, they leave the roost to feed on pollen, nectar and fruit. Unlike birds which can easily take off from a standing position, bats typically drop from heights before taking flight, so hanging upside down means taking off is just a matter of letting go. They will also flap their wings in hot weather, using blood pumped through the thin wing membrane to cool the body temperature.

## What sound do they make?

The voice of the Grey-Headed Flying Fox consists of a complex series of squeals and screechings.

## Where do they live and what do they need to survive?

During the day, individuals sleep and rest in their large camps. On dusk they leave the camps in search of food and can travel up to 50 km a night. Movements of the Flying Foxes are influenced by the availability of food. Their population is very fluid, as they move in response to the irregular blossoming of certain plant species.





# Powerful Owl

*Ninox strenua*

## What do they look like?

The largest of Australia's owls, the Powerful Owl usually inhabits moist forests of eastern Australia. This is a large owl with a relatively small head and a rounded tail. It is dark grey to dark grey-brown above, with white barring, and off-white below, with distinctive dark v-shaped chevrons. The eyes are yellow, set in a dark grey/brown facial mask. The legs are feathered and the yellow to orange feet are massive, with sharp talons. Adults reach 60 cm in length, have a wingspan of up to 140 cm and weigh up to 1.45 kilograms. This species is listed as "Vulnerable" in NSW.

## How do they move and behave?

The Powerful Owl lives permanently in breeding pairs once in adulthood. They have been observed roosting singly, in pairs, and in family groups of three or four. They nest in large tree hollows (at least 0.5 m deep), in large eucalypts (diameter at breast height of 80-240 cm) that are at least 150 years old. They are nocturnal hunters with a large territory up to 4,000 hectares.

## What sound do they make?

Powerful Owls have a slow, double-note whoo-hoo call that is soft, but very strong and resonant, and which can be heard more than one kilometre away.

## Where do they live and what do they need to survive?

The Powerful Owl is a carnivore, eating mainly medium to large tree-dwelling mammals, particularly possum and the gliders. It will also take roosting birds and sometimes small ground-dwelling mammals such as rabbits or small marsupials. It forages mainly in trees, swooping down on prey and taking prey with its feet.





# Snake-Necked Turtle - the “stinker”

*Chelodina longicollis*

## What do they look like?

The Snake-Necked Turtle has a long neck, which is usually about half the length of its carapace (shell). It has webbed feet used for swimming and digging. The colour of the carapace varies through shades of brown. Females tend to grow to larger sizes and have deeper bodies. The maximum sizes recorded for females and males varies throughout the range, in river environments of the Murray it is 28.2 cm and 24.9 cm respectively.

## How do they move and behave?

Most of the Snake-Necked Turtle's time is spent in the water, but it can make overland movements in search of new waterholes and nesting areas. When it feels threatened, this turtle will emit an offensive smelling fluid from its musk glands above each leg. The turtle squirts a liquid with a stinking and persistent odour, giving it the common name “stinker”.

## What sound do they make?

The only sound they will make is when splashing into or in the water.

## Where do they live and what do they need to survive?

Snake-Necked Turtles hibernate during winter and the summer rains are their cue to haul themselves out of their creeks and ponds to find food. These turtles move about the landscape in groups of up to several dozen. This Turtle is carnivorous eating a variety of animals, including insects, worms, tadpoles, frogs, small fish, crustaceans, and molluscs.





# Willie Wagtail

*Rhipidura leucophrys*

## What do they look like?

The Willie Wagtail is the largest (measuring 19–21.5 cm), and most well-known, of the Australian fantails. The plumage is black above with a white belly. The Willie Wagtail can be distinguished from other similar-sized black and white birds by its black throat and white eyebrows and whisker marks.

## How do they move and behave?

The name Wagtail stems from the constant sideways wagging of the tail. Willie Wagtails are active feeders. Birds can be seen darting around lawns as they hunt for insects on the ground. As they do so, the tail is wagged from side to side. Insects are also captured in the air, in active chases.

## What sound do they make?

The Willie Wagtail is very “chatty” and has a number of distinct vocalisations. Its most-recognised sound is its alarm call which is a rapid chit-chit-chit-chit, although it has more melodious sounds in its repertoire.

## Where do they live and what do they need to survive?

The Willie Wagtail’s nest is a neatly woven cup of grasses, covered with spider’s web on the outside and lined internally with soft grasses, hair or fur. The soft lining of the nest, if not readily available, is often taken directly from an animal. The nest of the Willie Wagtail may be re-used in successive years, or an old nest is often destroyed and the materials used in the construction of a new nest. Nests are normally placed on a horizontal branch of a tree, or other similar structure.

The Willie Wagtail features prominently in Indigenous mythology. In some areas Willie Wagtails were thought to loiter at the edge of camps, listening to conversations then telling the secrets elsewhere.





# Yellow-Tailed Black Cockatoo

*Zanda funerea*

## What do they look like?

The Yellow-Tailed Black-Cockatoo is a large cockatoo. It is easily identified by its mostly black plumage, with most body feathers edged with yellow, not visible at a distance. It has a yellow cheek patch and yellow panels on the tail. They measure 55–65 cm in length in length and are 750–900 grams in weight.

## How do they move and behave?

Yellow-Tailed Black Cockatoos can be seen out during the day and are raucous and noisy, and are often heard before being seen. They make long journeys by flying at a considerable height with long slow beats while calling to each other. They are often seen flying high overhead in pairs, or trios comprising a pair and their young, or small groups.

## What sound do they make?

The usual call is a high-pitched wailing contact call, kee-ow...kee-ow...kee-ow, made while flying or roosting, and can be heard from afar. Birds may also make a harsh screeching alarm call. They also make a soft, chuckling call when searching for Cossid Moth larvae.

## Where do they live and what do they need to survive?

Yellow-Tailed Black-Cockatoos feed in small to large, noisy flocks. The favoured food is seeds of native trees and pinecones, but birds also feed on the seeds of ground plants. They are often seen perching in trees ripping apart cones using their strong beaks to access the seeds. Some insects are also eaten. They nest in large hollows high in old growth native trees (~ greater than 200 years old), generally Eucalyptus.





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# Nature's benefits



Meaningful moments in nature help make you healthier and happier. It's proven, it's easy and it's free!

Now go on, enjoy!

**#goslowforamo**