

# Bushland Newsletter

AUTUMN 22



## On the go with Emily

The La Nina wet weather continues, coinciding with the Lunar New Year of the water tiger. Both signally a year for set for renewal, growth and overcoming challenges – at least our local vegetation seems to be going for it like nothing else. Weeds have been growing big, but often just below our native plants are also thriving. Wet weather has provided ample food for wildlife and this has brought about several wildlife sightings which in an average year would be rather rare. If you've been lying low with the ongoing pandemic, remember to take some time to reconnect and recharge by getting out into nature, who knows what you might find.

**Emily Strautins**  
Randwick City Council  
Bushland Officer

## WHAT'S ON



### 6 March – Clean Up Australia Day

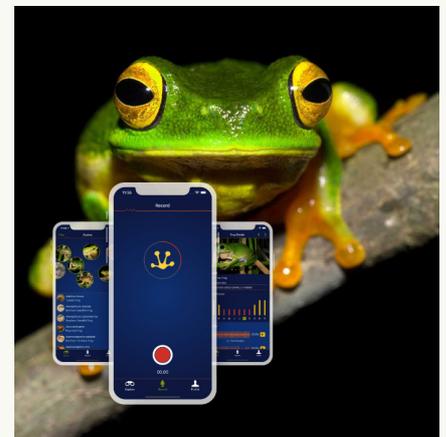
Will you help us keep Randwick clean? Make a difference this Clean Up Australia day on **Sunday 6 March 2022** by hosting or attending a clean-up event. Clean Up Australia Day is held on the first Sunday of March every year and encourages people to clean up their local areas. Participants can host or attend clean ups organised by local community groups, which can be found on the Clean Up Australia website. Randwick Council will support by collecting all the rubbish that is picked up by your team. To arrange collection of the rubbish and for any other information, contact Anil Gupta at [anil.gupta@randwick.nsw.gov.au](mailto:anil.gupta@randwick.nsw.gov.au). Find out more or register your event at [cleanupaustraliaday.org.au](http://cleanupaustraliaday.org.au).



### 1-7 May – International Compost Awareness Week Australia 'Better Soil, Better Life, Better Future'

International Compost Awareness Week Australia (ICAW), is a week of activities, events and publicity to improve awareness of the importance

of compost, a valuable organic resource and to promote compost use, knowledge and products. We can compost to help scrap carbon pollution by avoiding landfilling organic materials and helping to build healthier soils. ICAW Australia is an initiative of the Centre for Organic Research & Education (CORE), a not-for-profit organisation conducting year-round organic research, education and awareness activities.



### Launch of Randwick City Frog Finders

To make the most of the rainy weather Randwick City Bushland unit are coordinating a LGA wide study of frogs in our area, and we need your help! Understanding which frogs occur where, provides a snapshot of the different ecosystems and their connectivity within our city. The presence of frogs can be a great indicator for the other kinds of wildlife including wetland birds, reptiles and more. By downloading the FrogID app and recording frog calls you can help contribute to an Australia-wide citizen science project, that will also help us understand and enhance our local wetland ecosystems. It's free to download and a great way to learn which frogs might be living in your garden or neighbourhood.

Visit [frogid.net.au](http://frogid.net.au) and join the 'Randwick City Frog Finders' group today!

# Cuckoos – The birds and the bees



They're a group of animals many of us love to hate. Cuckoos are animals who sneak their own offspring into the nests of unsuspecting hosts, who then raise them as their own offspring. Often described as ruthless, evil, vicious or as their host's "worst nightmare", cuckoos play a very unusual ecological role. In birds, these animals are grouped under the family: Cuculidae which encompasses both Cuckoos, Coucals and Koels to include 147 species worldwide. Thirteen of these species occur within Australian. Yet unbeknownst to many, birds aren't the only animals who undertake the unusual behaviour of nest pilfering.

Within Randwick City there are a handful of cuckoo species. Likely the best known are the large and noisy migratory birds, the Channel Billed Cuckoo and the Eastern Koel. These seasonal visitors arrive in our area for spring to breed, often immediately noticed by people who live near habitat due to their easily identifiable calls which tend to start early in the morning and go all day. However, there are other species which occur locally which are not so rambunctious and may have defied notice. Lesser known is the permean residents of our city, the secretive Pheasant Coucal. Our city is also home to some native cuckoo bees, such as the stunning Neon Cuckoo Bee, who like their feathered counterparts sneakily utilised the nest of other native bee species. Read on to learn a little about these fascinating faunae.

## Channel Bill Cuckoo (*Scythrops novaehollandiae*)

**Call:** The call of the Channel-billed Cuckoo, a loud 'kawk' followed by a more rapid, and weaker 'awk-awk-awk...', is as distinctive as the bird's appearance. The call may be given when perched but is most often given in flight.



**Appearance:** Channel-billed cuckoos are striking to look at, and they certainly caught the attention of Captain Arthur Phillip. He wrote about them in his 1789 book 'The voyage of Governor Phillip to Botany Bay', comparing their features to those of the parrot, hornbill, and toucan. He gave the bird the genus name Scythrops, which comes from the Ancient Greek word skuthro-/σκυθρο, meaning angry, or sullen, eye or face. They are the largest of all parasitic birds (worldwide), growing up to 67cm and with wingspans close to one metre wide.

**Eats:** The favoured foods of the Channel-billed Cuckoo are native

figs and native fruits, but they also eat insects, as well as the eggs and nestlings of other birds.

**Distribution:** A summer visitor, spending the rest of its lifecycle in Indonesia and New Guinea

**Host Species:** Pied Currawongs, Australian Magpies, crows and ravens. Occasionally eggs are laid in the mud-nests of White-winged Choughs or Magpie-larks, and very occasionally in the nests of birds of prey

**Ecology:** Breeding pairs have been known to act together to target their host's nest. To do this the male flies high overhead making alarm calls, meanwhile the female lies low to dart into unattended nests as the hosts fly off to chase the male.

Unlike many other cuckoos, the young birds do not evict the host's young or eggs from the nest, but simply grow faster and demand all the food, thus starving the others. There is some anecdotal evidence that the host chicks don't take this lying down, and battle fiercely for their share, at least in the early stages.

## Pheasant Coucal (*Centropus phasianinus*)

**Call:** You might recognise the Pheasant Coucal by its distinctive 'oop-ooop-ooop' call. Sometimes mates will duet, providing a concert which some describe as reminiscent of water bubbling from a big bottle. In winter, its voice is a sharp hissing.



**Appearance:** Famously described as the closest thing to a real-life griffin, adult pheasants are well camouflaged with mottled brown scruffy feathers and a bright red eye.

**Eats:** They are ground feeders and mostly eat large insects, frogs, lizards, eggs and chicks and, sometimes, small mammals.

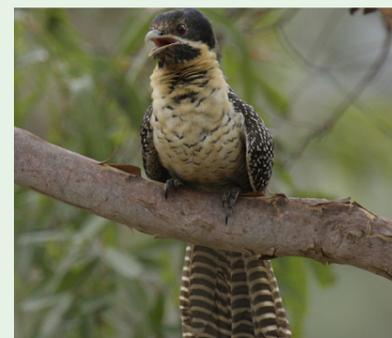
**Distribution:** One of the few birds on this list to hold permanent territories, which they inhabit year-round.

**Host Species:** None. Unlike almost all other members of its genus, this bird does not parasitize other birds' nests. Instead, it makes its own untidy jumble of sticks in thick scrub, grass or even lantana thickets

**Ecology:** Rarely seen, perhaps because this bird prefers to run rather than fly.

## Eastern Koel (*Eudynamis orientalis*)

**Call:** Male birds sing its own name "kooooo – EL", with the females replying with a repetitive "keek-keek-keek-keek"



**Appearance:** When seen, the male Eastern Koel is easily identified by its entirely glossy black plumage, tinged with blue and green, and striking red eye. The female has glossed brown upperparts, heavily spotted with white, and a black crown. The underparts are generally buff cream with numerous

fine black bars. Young birds resemble the adult female but have considerably more buff and a dark eye. Adults are rather shy, and they are heard much more than seen. In contrast to the adults, fledglings can be very conspicuous as they beg loudly for food from their foster parents.

**Eats:** Fruits and berries, both native and exotic.

**Distribution:** Most Koels migrate from Australia to New Guinea and probably eastern Indonesia and even further north, but some remain in northern Australia. During breeding season, they are found in northern and eastern Australia, south to about Nowra, New South Wales, although occasional birds are encountered further south.

**Host species:** Red Wattlebird, friarbirds, the Magpie-lark and Australasian Figbirds.

**Ecology:** Originally associated only with tall forest habitats, Koels appear to be becoming more common in cities, such as Sydney and Brisbane, perhaps because of the abundance of ornamental plants and weeds that produce berries. Another factor that probably contributes to their increasing abundance is the proliferation of some of their hosts, particularly the Red Wattlebird which benefits from the nectar producing plants we like to plant in gardens and parks.

## Neon Cuckoo Bee (*Thyreus nitidulus*)



**Appearance:** Visually striking, this bee sparkles in the sunlight. This inspired its name which roughly translates to little shiny, bright and/ or elegant. Its entire body is iridescent blue-black, with wings that have a violet sheen.

**Distribution:** Found in New Guinea and throughout eastern and northern

Australia, in New South Wales, Queensland, South Australia and the Northern Territory. Cuckoo bees live in urban areas, forests and woodlands, and heath.

**Host Species:** Highly specific to the nests of the Blue-banded Bee

**Ecology:** Unlike honeybees, Blue-banded bees are solitary and build a single burrow. Into this they may have several brood cells each containing an egg with a serving of protein-rich pollen which provides the hatching larvae the energy it needs to get started in life. Once finished the Blue-banded Bee mother will seal the entrance to its burrow with wax to keep them safe until they are ready to emerge as adult bees. However, if they are distracted before completing this task, a Neon Cuckoo Bee may sneak in, to lay its own egg. The larvae of the Neon Cuckoo Bee, is often faster to develop and hatch allowing this species to eat up the pollen reserve, leaving the blue-banded bee hatchling to starve.

In summary: Science fiction really has nothing on the strange variety of life which occurs on our planet. Whatever you think of this somewhat innovative approach to parenting, it's important to remember that these animals are native and a natural part of the ecosystem. In fact, the presence of cuckoos can be an important ecosystem quality measure, as without thriving populations of their preferred host species cuckoos would not be able to breed. New studies have even begun to reveal cases where host species actually benefit from the presence of certain cuckoos. Indeed, for species, such as magpies, which don't have many natural predators, cuckoos may help regulate population size. This may explain why host species don't develop methods to better at recognise and expel these interlopers. Historically science has based understanding of ecosystem on the assumption that species are forever locked in a competitive fight for survival. Whilst this may be part of the story, it overlooks the many collaborative and cooperative relationships which also occur, perhaps saying more about us and our attitudes than the animals themselves. Love them or hate them, it is undeniable that cuckoos play a unique ecological role.

# All about Acacias

With nearly a thousand species, Acacias are the largest genus of woody plants in Australia, according to the Australian National Botanic Gardens. They are the country's floral emblem and even have their own day, Wattle Day, celebrated on 1 September each year.



The Myrtle Wattle (*Acacia myrtifolia*), an attractive local species.

They thrive in a wide range of environments, from arid central Australia to rainforests and on sandy beaches around the coast. There is similar variety in their size and form, from prostrate and low-growing species to tall trees.

The name acacia comes from a Greek word meaning thorny, referring to the sharp-thorned species from the African savanna and tropical Asia.



Acacia seed pods are distinctive to the Fabaceae family.

Acacias are in the pea family Fabaceae and, like other members of this family, are able to fix nitrogen in the soil through bacteria living in the roots. The nitrogen can be used by the plant and is then released into the soil after the plant dies, making it available to other plants.

Most of the Australian wattles don't have true adult leaves. While the first leaves to emerge are true leaves, delicate and fern-like, the adult 'leaves' are actually phyllodes, flattened leaf stalks, likely to have evolved as a means of conserving moisture in hot, dry climates.

Acacias are most noticeable when in flower. The flowers have no petals and are made up of clusters of pollen-bearing stamens. The flower heads tend to be in balls or spikes and in all shades of yellow. One Queensland species has purple flowers, while one form of another species (*Acacia leprosa* 'Scarlet Blaze') has red flowers.

Up to one-third of Australian wattles flower in winter, providing a valuable winter food source for insects, which, in turn, are a food source for birds. Some species have nectar glands on the leaf stalk that produce a flow of nectar for insects and small honeyeaters. Wattles also provide shelter, protective cover and nesting sites for birds.

Acacias are typically fast-growing and can be planted to provide quick shelter or as a nursery plant to provide immediate impact and protect smaller more vulnerable plants.



The juvenile leaves of the Sweet-scented Wattle (*Acacia suaveolens*) are small, rounded, and delicate, compared to the tough, elongated adult phyllodes.



Prickly Moses (*Acacia ulicifolia*) is aptly named for its sharp, pointy leaves. These spiky plants provide valuable habitat for small birds, protecting them from predators.

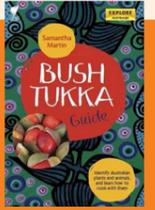
Native plant enthusiasts Kate Herd and Jela Ivankovic-Waters say too many gardeners shun the wattle because of its reputation for being short lived, even though they can live for 20 or 30 years. 'Many small to medium acacia shrubs are some of the spunkiest, fastest-growing options for low shapely cover,' they say in the book *Native: Art and Design With Australian Plants*. 'They also make an immediate impact with their yellow flowers, which signal seasonal change, attract birds and spark up dowdy garden areas.'

Local wattles grown by the nursery include the Coastal Wattle (*Acacia longifolia* subsp. *sophorae*), Sweet-scented Wattle (*Acacia suaveolens*),



Wattles such as this Coast Myall (*Acacia binervia*) have unique characteristics that can add colour, structure and contrasting detail to any garden.

## Samantha Martin's Native Bush Dukkah recipe – as seen in her book *Bush Tukka Guide* (Martin, 2014)



### Ingredients:

- 25g Bush tomatoes, whole or crushed
- 25g Dried lemon myrtle leaves, whole leaves or crushed
- 10g Wattleseeds, whole or crushed
- 10g Bush mountain pepper, whole or crushed
- 10g Sea salt, whole or crushed
- 100g roasted almonds, whole or crushed

### Method:

1. If you are using whole ingredients, put the bush tomatoes, lemon myrtle, wattleseeds, bush mountain pepper and sea salt into a food processor or blender, and grind coarsely. Add the roasted almonds, and grind a little more, until powdered to your liking.
2. If you are using crushed ingredients, put all the ingredients into a sealable sandwich bag and shake well. Crush the roasted almonds and add to the mixture, combining all ingredients well.

Best served with Australian olive oil and fresh rustic bread

Myrtle Wattle (*Acacia myrtifolia*), the spiky Prickly Moses (*Acacia ulicifolia*), which is a fantastic bird refuge plant, and the Eastern Sydney Sunshine Wattle (*Acacia terminalis* subsp. Eastern Sydney), an Endangered Species confined to the eastern suburbs of Sydney, between Cronulla and Manly.

Two of the most beautiful small wattles for landscaping are the Honey Bun Wattle, a cultivar of the Sticky Wattle (*Acacia howittii*), and the Limelight Wattle, a cultivar of the River Wattle or Bower Wattle (*Acacia cognata*).

Wattles will grow in full sun to partial shade but prefer well-drained soils. Like banksias and grevilleas, they can be sensitive to phosphorous, so feed with a native fertiliser.

With the exception of cultivars like the Limelight and Honey Bun, wattles are normally propagated from seed rather than cuttings. The seed has a tough coat that allows it to survive in the soil during a fire and needs to be soaked in boiling water before being sown. Alternatively, the outer surface of the seed can be sandpapered, known as scarification, which will allow water to penetrate and the seed to germinate.

First Nations people harvested the seed of some Acacia species to be ground into flour and made into a paste or cooked into cakes or damper, and

wattleseed is a popular ingredient in modern 'bush food' recipes. However, not all Acacias are suitable for human consumption. Some seeds contain toxins and need to be prepared in a certain way to eliminate these toxins.

It's time to rethink how we use these stunning species in our plantings.

*Bibliography: Let's Propagate: A Plant Propagation Manual for Australia, Angus Stewart, Allen & Unwin, Sydney, 2012; Australian Native Plants: Cultivation, Use in Landscaping and Propagation, John W. Wrigley and Murray Fagg, Reed New Holland, Sydney, 2007; Native: Art and Design With Australian Plants, Kate Herd and Jela Ivankovic-Waters, Thames & Hudson, Melbourne, 2020; Birdscaping Australian Gardens, George Adams, Penguin Random House Australia, 2015; Bush Tukka Guide, Samantha Martin, Explore Australia Publishing, Richmond Victoria, 2014*



The endangered Eastern Sydney Sunshine Wattle (*Acacia terminalis* subsp. Eastern Sydney) is grown at the nursery for bush regeneration projects.



# Roaming Bushcare

## Who/What/Where/Why?

During the usual Bushcare shut down period in January, the cooler than usual weather permitted an extra Bushcare working bee. Co-operative relationships between the bushland team and St Michaels Golf Course management afforded the opportunity for our volunteers to access the beautiful remnant patch of Apple-gum woodland which occurs near the course perimeter.

By helping to enhance the habitat here, we are aiding connectivity between areas contained within national park, private and public lands. This supports the flow of genetic material and species through the landscape, which in turn increases the likelihood that this community and the wealth of biodiversity it contains continues to thrive into the future.



This type of woodland is closely related to eastern suburbs banksia scrub, but distinguishable by the taller average height of the canopy. This ecological community grows specifically where dune systems have been stable and undisturbed for a long time. It is very susceptible to erosion, and if cleared or damaged can be lost forever. For this reason, although not listed as threatened it is considered locally rare, found only within national park, golf courses and small isolated patches in our city.

Our work on the day included targeting just 3 weeds: ground asparagus, lantana and bitou bush. Once these weeds are controlled the area should be able to return to near pristine condition thanks to a diverse assemblage of indigenous plants which already grow throughout and the ongoing efforts of grounds staff at St Michaels.



# Stories from Grant Reserve Bush Garden

Hi Emily,

We thought we should let you know some news from the garden.

It is a long story, but Dave (from the Council Nursery) gave us 14 very sad and sorry looking "orphan" Gungurru (*Eucalyptus caesia*).

The day before we had bought one because Mark felt sorry for it. We planted it in the bush garden.

The next morning Mark became convinced that we had to rescue the remaining plants.

Over the past fortnight we have been working on the garden each morning from 6-7am before our swims. For each of the last five days, Mark has carefully

chosen "just the right spot" for three Gungurru and cleared the La Niña weed explosion. So now all 15 are planted!

In writing this I am thinking they are not so much orphans as homeless. The bush garden has quite a history on that front.

It has 10 once homeless Gynea Lilies. The first two were from a friend's tiny garden - the biggest is Gough and its partner is Margaret. The other 10 were saved from being ripped out of an apartment block garden to make way for lawn. We also had a homeless Australian Red Cedar, once endemic to the Coogee area. We named it Bob Brown and it was doing well but suddenly died.

We even had a homeless person sleeping there for a while and Lynn and I carried out our monthly bee quietly so as not to disturb him.

Oh yes and a woman in the boarding house over the road used to leave tins of cat food for the numerous abandoned cats in the area. We contacted cat rescue and tolerated the tins for a while despite our aim of providing bird habitat.

### Rona and Mark xx

*Grant Reserve Bushcare Group works adjacent the South Coogee Surf Club on the 3rd Wednesday of the month at 8am-10am.*



The very sad looking orphan gungurru.



In the ground and already looking happier with new growth appearing.



Fingers crossed a couple survive to become beautiful mature flowering mallees one day.

**Got a snap to share?** We'd love to share your recent photos of native plants, animals, or you - getting out into nature. Please send your photos to [bushcare@randwick.nsw.gov.au](mailto:bushcare@randwick.nsw.gov.au).

# Working bee calendar

## BUSHCARE

GROUP	LOCATION	DAY	TIME	MAR	APR	MAY
<b>Clovelly Bay</b>	Opposite 18 Eastbourne Ave, Clovelly	Friday	9am-11am	11	8	13
<b>Dunningham Reserve</b>	Adjacent 5-7 Major Street, Coogee	Thursday	9am-11am	24	28	26
<b>Fred Hollows Reserve</b>	Bligh Place entrance, Randwick	Wednesday	9am-12pm	9	13	11
<b>Gordons Bay</b>	Access via UNSW Cliffbrook Campus Grounds, 45 Beach St, Coogee	Sunday	9am-1pm	6	3	1
<b>Grant Reserve</b>	Coogee Surf Life Saving Club carpark (south of the beach)	Wednesday	8am-10am	16	20	18
<b>Ladies Pool (Ladies Only)</b>	At the entrance to the Ladies Pool, McIver's Rock Baths, Coogee	Thursday	9am-12pm	17	21	20
<b>Malabar Foreshore</b>	Opposite 9 Bay Parade, Malabar (near Malabar Ocean Pool)	Saturday	8am-12pm	5	2	7
<b>Malabar Wetland</b>	End of Manwaring Avenue, Maroubra	Wednesday	1pm-4pm	16	20	18
<b>Maroubra Dunes</b>	The South Maroubra SLSC car park	Thursday	9am-1pm	3	7	5
<b>Prince Henry</b>	Alternate between the corner of Jennifer and Harvey St or opposite 2 Millard Dr, Little Bay	Saturday	9am-12pm	12	9	14
<b>Randwick Environment Park</b>	Access via corner of Dooligah Avenue and Burragulung Street, Randwick. Works take place within fenced area on the far side of the oval.	Wednesday and Sunday	9am-12pm	2, 13	6, 10	4, 8
<b>Wyllies Baths</b>	At the picnic tables above Wylie's Baths, Neptune Street, Coogee	Tuesday	8am-12pm	22	26	24
<b>Little Bay Landcare*</b>	Access between 119 and 121 Bilga Crescent, Malabar. Contact Kerry Gordon on 0411 245 985.	Saturday	8am -12pm	5	2	7
<b>Friends of Malabar Headland*</b>	Contact Therese Weiss on 0403 532 655 or via malabarheadland@gmail.com for details.	Thursday	9am-1pm (earlier start and finish when hot)	10, 17, 24	14, 21, 28	12, 19, 26

\* Denotes non-council run groups. Please contact organisers directly.

## PARKCARE

GROUP	LOCATION	DAY	TIME	MAR	APR	MAY
<b>Alison Road</b>	Corner of Alison Road and Beach Street, Coogee	Wednesday	8am-10am	23	27	25
<b>Clyde Street</b>	Clyde Street Reserve, Randwick	Saturday	1pm-3pm	5	2	7
<b>Old Tramline</b>	The reserve between Dudley Street and Carrington Road, Randwick	Thursday	8am-12Pm	10	14	12