

Bushland Newsletter

AUTUMN 24



On the go with Emily

It's good to be back! Something in the air (perhaps it's all that humidity?!) tells me that 2024 is going to be another big year.

Plants are thriving with the warm wet conditions of last summer, though the pending drought seems on its way.

In the bushland team we are looking forward to welcoming a new member of our team, to fill the void left by Dan Hall as he takes on new challenges working in Councils tree team.

As the weather cools some plants slow their growth rate, but don't be fooled there is still lots happening and lots to do!

Peer into the undergrowth (as we do in this edition) and you may be surprised to find a diversity of life hiding away, waiting for the next sunny day.

Emily Strautins
Randwick City Council
Bushland Officer

NEWS UPDATE

Paul and Ian show off their Bushcare swag, including commemorative '30 years of Bushcare' mugs. These mugs are great to take camping, picnicking or for morno's at Bushcare! There are mugs available for all our regular volunteers, if you haven't got yours, get in touch with our Bushcare Officer who will be distributing them this season.



WIRES Winter donations

As we prepare to get cozy, think about how local wildlife might be attempting to do the same. The local Eastern Sydney WIRES branch is always on the lookout for supplies to help wildlife that comes into their care. To help with this, the Bushland team will be gathering donations of the following:



- Towels: clean and free of loose threads;
- Pillowcases and pouches: made from natural fibres: cotton, flannelette, linen, bamboo or wool;
- Cages & Carriers: Large cages, top-opening pet carriers/rescue baskets, portable or flatpack aviaries (all must be clean and in good condition); and
- Food Bowls: Ceramic or metal food bowls.

You can learn more or donate directly via wires.org.au/donate-goods

Watch Out – Ferals About!

Wet summers often mean increased populations of foxes, starlings, mynas and the movement of cane toads. Each of these species was released into the wild by people, so it's up to us to help support the species which were here first.

All the best science indicates that the only effective management of invasive species is through regional approaches. To support these efforts DPI developed Feral Scan, a free app which makes it super easy to record the location and impacts of these pesky animals.

The more people looking out and recording the better! Download the app direct to your phone, or visit: feralscan.org.au





Life in the undergrowth – the value of woody debris and undisturbed dirt

“When we try to pick out anything by itself, we find it hitched to everything else in the universe” - John Muir, infamous naturalist and environmental philosopher.

Contemporary nature conservation approaches recognise that any given species exists as part of a community. This is a wholistic acknowledgement of ecosystems as a collection of all kinds of life – some which are easily observable, like plants and animals, and some which are not so easily seen with the human eye such as fungi, insects, bacteria and more.

Although we might not notice their presence, it doesn't mean these other lives aren't paying a vital part in our environment. In this article we look at a few amazing, yet oft overlooked Randwick residents and think about the small things we do in the garden or bush which may unintentionally help or hinder their survival.

Fungi and bacteria

The kingdom of fungi is one scientist are only really beginning to uncover. Mycelium networks acting like the world wide web for forests, physiological interactions with plants and animals, not to mention the activities wandering slime moulds are all areas of research generating revelations for how we think about life.

Mushrooms are the fruiting bodies of fungi and not all fungi produce them, just as not all plants reproduce by placing their seeds inside berries. Though you may not see them, fungi are everywhere from soil to water, inside living tissue to encased in rock, and in all these setting they are performing serious work. These lifeforms are also key functional elements found in healthy soil.

Both are powerhouse recyclers, without which our planet would have drowned in detritus long before our species had a chance to have evolved. Some are highly specialised and will only occur in association to particular plants, decaying wood, soils or substrates.

Insects and other invertebrates

Bees are not the only pollinators in the garden! There is a huge amount of invertebrate diversity in the garden helping to breakdown waste, assist in the flow of energy and contribute to reproduction of plants and other species.

A healthy ecosystem contains its own checks and balances to maintain lots



This female Peacock Carpenter Bee (*Xylocopa bomylians*) shines incandescent in the sunlight. As the name suggests, these bees drill into soft wood to make their nests.

of different species, with no single species dominating. These dynamics are complex and when they are working well don't attract much attention.

You can support them by ensuring your garden contains not only the favourite food of beneficial bugs, but also places for them to reproduce, nest and shelter. For example, many native bees like to burrow in areas of exposed sand, into wood or pithy stems. It's as simple as leaving a few warm corners of the garden unmulched, keeping areas of leaf litter, sticks or logs, or perhaps adding some species-specific habitat (Aussiebee.com.au is a great place to learn more).

Frogs and reptiles

Frogs and reptiles often make up the largest proportion of vertebrate biomass in Australian ecosystems, making them essential food chain stabilisers. Snakes help keep rodent populations in check, just as frogs and lizards munch on pesky insects. But these animals are also prey, providing a rich source of protein to all kinds of birds and mammals.

Urban environments can be hard places to survive particularly for larger bodied species such as water dragons, which may be slower to flee from predators like cats, dogs and foxes. Yet given a chance, more discrete skinks and frogs can proliferate in gardens.

Green waste piles left by bush regenerators can provide a haven for predators and prey. In the depth of winter, when ambient temperatures are below that needed to be active, frogs can be observed snuggling up in close proximity to red-bellies as both species wait for warmer times.



The Leafless tongue orchid (*Cryptostylis erecta* – cryptic in name and habit!)



Fairy orchid (*Caladenia alata*) grow at the spongy edges of sandstone outcrops

Ground orchids often rely on close associations with fungi within the soil, a relationship which still stumps scientists and horticulturalists alike, preventing cultivation of many Australian orchids. Without long-term records of their occurrences and protection of their habitat, these species are at high risk of extinction.

Conclusion

Micro niches like under rocks and log, deep leaf litter, mulch and even human made structures such as sheet metal, culverts and building materials can create moist, humid environments with stable temperatures and a feast for some!

Places to hide from predators or from climatic fluctuations are essential for small, bodied creatures. To help them is simple: DON'T TIDY THE BUSH! Leave logs, sticks and stone



Aptly named Ghost Mushrooms (*Omphalotus nidiformis*) are common, looking pretty ordinary in daylight (Left) but glow in the moonlight (right).



Peron's Tree frogs love any humid place they can climb in and hide.

Cryptic orchids

Many ground orchids may not be visible above ground for much of the year, or even longer as they wait for conditions to become ideal for propagation. Only then will a small leaf emerge, generating enough solar power to then produce a flower. Species such as the sun orchid, of the genus *Thelymitra* will then wait for the perfect sunny day to bloom. Being there in time to witness these beautiful flowers can be tricky and before long all above ground traces disappear.

Ferntastic Ferns – Our Top 8 Aussie Ferns!

Ferns are great for those shady nooks and crannies in our gardens. They provide an excellent habitat for a range of frogs, lizards and insects, while also creating vast visual interest with their variety of textures and colours. They are often more versatile than they first seem, with some tolerating drier soils, moderate winds and even a life indoors.

Ferns make up their own kingdom and are unique in that they do not reproduce from seeds like other plants, they reproduce via spores! Rather than flowers forming, spores form on the underside of fertile fronds and are then transported via wind and water. You may find opportunistic clumps within shaded areas of your yard. Some ferns can also reproduce by proliferous frond tips which is where a fern frond droops to reach the ground and forms a connection with the earth by growing root tips. Another method of multiplication is via rhizomes (horizontal roots) that travel and pop up in alternative locations creating a clone of the parent plant.

Prickly Rasp Fern – *Doodia aspera*

This hardy fern has a rough leaf that forms in a tufted, fountain like plume with bright pink to red fronds that turn green with age and short-creeping underground rhizomes. Typically found in Queensland, Eastern NSW, Eastern Victoria in eucalypt forests and rainforests, they can

adapt well to a garden bed, pot or hanging basket. Prickly Rasp Ferns prefer shady conditions with acidic, well-draining, well-watered soil and high organic composition. Here, they can thrive and grow to a height of 40cm with a width of 60cm.

FUN FACT Named after Samuel Doody, an English Botanist.



The bright pink, rough leaves add colour and texture to a garden

Kangaroo Fern – *Microsorium diversifolium*

Happiest in semi-shade to shade, Kangaroo Paw Ferns are suitable for cooler climates but can tolerate warm weather, just not direct sunlight. With a height of 30cm tall and a reach of up to 1m, far reaching hairy rhizomes mean that this fern is a fantastic ground cover or undergrowth fernery but will also do well in a pot or hanging basket. Deep green, differing shaped leathery fronds make this fern the perfect ornamental plant. The bathroom can provide a humid and warm environment that they can thrive in.

FUN FACT This fern will grow in most locations in Australia and can tolerate light frosts.



Lime green glossy leaves of the Kangaroo

Maidenhair Fern – *Adiantum aethiopicum*

Commonly seen growing up to 1m in diameter in moist areas, by creeks or in open forests but if inside, high light areas are best. Terrariums, pots and hanging baskets work well with a moist, well-draining soil that is high in organic compost. If growing inside, give their delicate, papery, scallop-shaped leaves a light mist (especially



There are 7 different species of maidenhair native to NSW.

when air con is running) or keep in the bathroom as the shower provides a high humidity. Treat your Maidenhair Fern to a diluted liquid fertiliser on a regular basis.

FUN FACT Maidenhair ferns do not like a draught!

Birds Nest Fern – *Asplenium australasicum*

Found predominantly growing naturally in wet forests and rainforests of south and central coasts of NSW and coastal QLD to cape York, Bird Nest Ferns prefer a shaded to semi-shaded spot, as a full sun position will burn their fronds. They are epiphytic, meaning that they can grow on the surface of other trees and use the air, rain and any composting debris as nutrients. They are also lithophytic which means they can grow on the surface of a rock face. Their basket style leaf formation can grow to 2-3m wide which is perfect to collect fallen leaves! If planted in the ground, they are very flexible in their soil type but do prefer neutral to acidic spaces. Alternatively, they can be planted into pots! Birds Nest Ferns enjoy a half strength fertilise in the warmer months and can withstand a light frost in Winter.

FUN FACT Bird Nest Ferns can also use their 'nest' to collect water!



Birds nest ferns climb the heights of tall trees

Elkhorn Fern – *Platycerium bifurcatum*

Similar to Birds Nest Ferns, Elkhorn Ferns are also epiphytic and lithophytic! Each Elkhorn Fern is a mass of 12cm-30cm overlapping plantlets that cluster against the bark of a host tree's trunk or branches. Each individual plantlet can branch out to up to 2m diameter. To recreate this in the home environment, plantlets are attached to a board that is backfilled

with orchid mix or sphagnum moss and hung on a tree branch or hook on the wall in a shaded spot. Elkhorn Ferns are partial to a diluted balanced liquid feed in Spring and Summer. Keep them moist but not wet by giving them a light spray with the hose when the weather conditions are particularly hot or rain is scarce.

FUN FACT Elkhorn Ferns earned their common name from their antler like leaf formation.



Birds nest ferns climbing the heights of tall trees

Staghorn Fern – *Platycerium superbum*

Staghorn Ferns develop a large 'nest' sitting high and proud that is a vital tool for collecting much needed composting leaves in a rainforest setting. If enjoying these beautiful ferns in your home garden, they appreciate a regular diluted liquid fertiliser. If propagating in a home environment, they can be attached to a board using the same method explained in Elkhorn Ferns. The two ferns are similar but you can tell them apart from the size of their 'nest' and the shape and volume of fronds.

Their hanging 'fertile' fronds can hang to 2m long and they use these to release spores from the underside of their leathery leaves. They prefer a bright but filtered light and higher humidity.

FUN FACT 'Sterile' fronds grow at the back of the fern to securely attached it to the tree or rock face. When these fronds die back, they become a sponge to hold water for drier periods.

Sickle Fern – *Pellaea falcata*

A tough, low maintenance fern with shiny, dark green fronds that is perfect for ferneries and rockery gardens. The short, branching

underground stems start bent over and slowly coil as they age and later in their life cycle, the midrib remains rigid after the leaves fall away. Fronds can grow up to 1m in length with each having between 20-65 leaflets. These ferns can take very bright, indirect light and require regular watering. They prefer moist, organic compost rich and well-draining soil.

FUN FACT Sickle ferns are both cat and dog friendly so make a great cat enclosure option or house plant if you have furry friends!

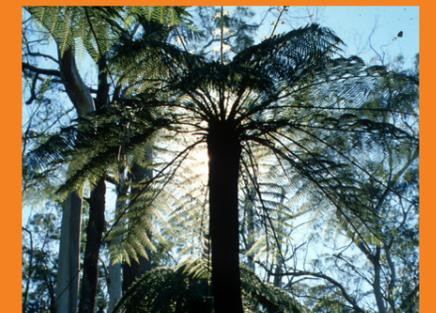


Sickle fern

Rough Tree Fern – *Cyathea australis*

A beautiful tall fern with a straight, slimline trunk and a pronounced crown of large expanding fronds. They prefer a semi-shaded and sheltered position but will tolerate full sun in cooler climates as long as humidity and soil moisture is kept high. Generally seen at 6m high but can grow to 15m in height in the right conditions. Their canopy can extend up to 6m wide, with each branch being 3m. It is the hardier of the tree ferns and can withstand dryer slopes even though it prefers mountain areas. Take care to plant in a sheltered area as they do not take well to even a light frost.

FUN FACT The pith (centre of the trunk) of a tree fern can be eaten, but once removed this will kill the plant.



Cyathea australis can be identified by the 'rough' looking trunk

Growing Food for Wildlife Project Blooms at Randwick Sustainability Hub

Excitement is in the air as we gear up for a ground-breaking collaboration in 2024. The Growing Food for Wildlife Project (GFWP) is set to connect Randwick residents with our native animals in a remarkable way every second Saturday of the month, from 10 am to 12 pm, at the Saturday Circle at Randwick Sustainability Hub.

The local wildlife rehabilitation community works tirelessly to rescue, rehabilitate, and care for injured wildlife. But have you ever thought about the challenge of sourcing enough food for these remarkable creatures. Rehabilitation volunteers can spend hours every week trying to find enough native foliage and flowers.

Recently, due to higher than usual demands on their time to assist injured animals, the opportunity for experienced wildlife rehabilitators to share their knowledge of animals with the public has been restricted. As a result, time to spend with the public

and to help them understand our wildlife's needs has also diminished.

In response to this, the Growing Food for Wildlife Project was created as a bridge that connects experienced rehabilitators, bush care volunteers, and the public. It has become a platform to share knowledge and foster stronger connections between those who care for the welfare of our native animals, native plants, and the general community.

Shaun Warden, a wildlife rehabilitator, citizen scientist, educator, and aspiring veterinarian, believed that if he could find suitable spaces, he could inspire the general community to understand the needs of our native plants and animals, and start to grow food for injured animals and in doing so, help both the animals and the carers.

Late last year, Shaun came across the Randwick Sustainability Hub, and after a meeting with Julian Lee Randwick's Sustainability Educator, the idea was formed to collaborate at The Saturday Circle, a monthly repair, share, regen and resilience building get-together.

Shaun knows that with flowers, fruit and fresh foliage lily pillies provide a feast for wildlife.



An adult Brushtail possums need about 200g of fresh picked food a day.

"Randwick Sustainability Hub is a perfect venue to work with the community on the Growing Food for Wildlife Project," said Shaun. "Not only do the animals benefit, but many lasting friendships have blossomed. We can't wait to share the fruits and foliage, of this partnership with the very special local wildlife".

As we embark on this journey with the Growing Food for Wildlife Project at the Randwick Sustainability Hub (27 Munda St, Randwick), we invite you to join us on the second Saturday of the month, every month.

Let's sow the seeds of compassion, knowledge, and community spirit to nurture our bushland and its inhabitants. The GFWP is more than just about growing food; it's about cultivating connection, understanding, and a shared responsibility for the well-being of our natural world.

For more information visit www.growingfoodforwildlifeproject.org

To book visit events.humanitix.com/tours/the-saturday-circle



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.

Right:

Watching this young butcher bird hatch and grow was a joy for recent recruit Andy Kelsey.

Below:

Jasper Odger's captured this Gully Skink watching him as he weeds. The Fred Hollows Bushcarers have been thrilled to see the population of this special little lizard rebound in the area we've worked from 100% trad to a diverse native cover.



Working bee calendar

BUSHCARE

| GROUP | LOCATION | DAY | TIME | MAR | APR | MAY |
|----------------------------------|---|------------------------------|----------|--------|---------------------------|--------|
| Clovelly Bay | Opposite 18 Eastbourne Ave, Clovelly | 4th Friday | 9am-12pm | 22 | 26 | 24 |
| Dunningham Reserve | Adjacent 5-7 Major Street, Coogee | 4th Thursday | 9am-11am | 28 | ANZAC Day – no session | 23 |
| Fred Hollows Reserve | Bligh Place entrance, Randwick | 2nd Wednesday | 9am-12pm | 13 | 10 | 8 |
| Gordons Bay | Access via UNSW Cliffbrook Campus Grounds, 45 Beach St, Coogee | 1st Sunday | 9am-12pm | 3 | 7 | 5 |
| Grant Reserve | Coogee Surf Life Saving Club carpark (south of the beach) | 3rd Wednesday | 9am-11am | 20 | 17 | 15 |
| Ladies Pool (Ladies Only) | At the entrance to the Ladies Pool, McIver's Rock Baths, Coogee | 3rd Thursday | 9am-12pm | 21 | 18 | 16 |
| Malabar Foreshore | Opposite 9 Bay Parade, Malabar (near Malabar Ocean Pool) | 1st Saturday | 9am-1pm | 2 | 6 | 4 |
| Malabar Wetland | End of Manwaring Avenue, Maroubra | 3rd Wednesday | 1pm-4pm | 20 | 17 | 15 |
| Maroubra Dunes | The South Maroubra SLSC car park | 1st Thursday | 9am-12pm | 7 | 4 | 2 |
| Prince Henry | Alternate between the corner of Jennifer and Harvey St or opposite 2 Millard Dr, Little Bay | 2nd Saturday | 9am-1pm | 9 | 13 | 11 |
| Randwick Environment Park | Access via corner of Dooligah Avenue and Burragulung Street, Randwick. Works take place within fenced area on the far side of the oval. | 1st Wednesday and 2nd Sunday | 9am-12pm | 6 & 10 | 3 & 14 | 1 & 12 |
| Wylies Baths | At the picnic tables above Wylie's Baths, Neptune Street, Coogee | 3rd Tuesday | 9am-12pm | 19 | 16 | 21 |
| Alison Road | Corner of Alison Road and Beach Street, Coogee | 4th Thursday | 1pm-3pm | 28 | ANZAC Day – no session | 23 |
| Old Tramline | The reserve between Dudley St and Carrington Rd, Randwick | 2nd Thursday | 9am-12pm | 14 | 11 | 9 |

NON-COUNCIL RUN GROUPS

| | | | | | | |
|--|---|------------------------------|---------------------------------|--------------------|-----------------------|--------------------|
| Friends of Malabar Headland* | Contact Therese Weiss on 0403 532 655 or via malabarheadland@gmail.com for details. | 2nd, 3rd and 4th Thursday | 9am-1pm | 14, 21 & 28 | 11, 18 & 25 | 9, 16, 23 & 30 |
| Little Bay Landcare* | Access between 119 and 121 Bilga Crescent, Malabar. Contact Kerry Gordon on 0411 245 985. | 1st Saturday | 8am-12pm | 2 | 6 | 4 |
| Kamay Botany Bay National Park* | Contact National Park Rangers for details. | Every Tuesday & 4th Saturday | Tues: 9am-12pm Sat: 8am-11am | 5, 12, 19, 26 & 23 | 2, 9, 16, 23, 30 & 27 | 7, 14, 21, 28 & 26 |

For more information contact the Bushcare Officer via: bushcare@randwick.nsw.gov.au

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