banksia bulletin

winter 2023

Magpie Geese visit YWNR

Interesting bird sightings

Wildflower Walks coming soon

Bayside CITY COUNCIL

From the Mayor

Welcome to the winter edition of *Banksia Bulletin*.

This is a very interesting edition showcasing the many wonderful species of flora and fauna we have in Bayside, many of which are rare sightings for our area.

Michael Norris has written a great piece (see page 5) highlighting the finalisation of the historic handover of Highett Grassy Woodland Reserve to Council ownership.

Left to right: Bayside CEO Mick Cummins, Pauline Reynolds – Friends of Highett Grassy Woodland, Mayor Cr Hanna El Mouallem and Michael Norris – Friends of Highett Grassy Woodland

This is a wonderful milestone for Bayside and will ensure the protection of endangered grassy woodland plains for generations to come.

Handover of the three-hectare area in the south of the former CSIRO site on Graham Road, Highett, is the culmination of an advocacy campaign over many years by Council and a team of dedicated community members, including the Friends of Highett Grassy Woodland group.

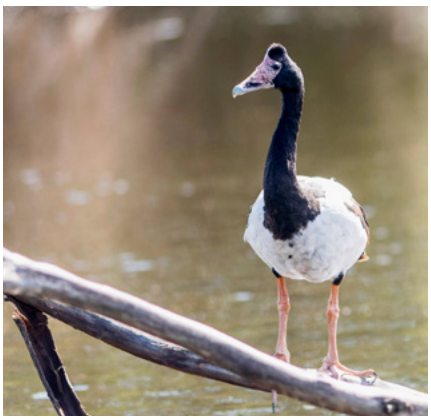
On behalf of Council, I would like to extend my gratitude to the community members who worked incredibly hard to see this day. In particular, I would like to acknowledge the work of Michael Norris and Pauline Reynolds, Friends of Highett Grassy Woodland, volunteers and passionate Council staff and locals.

This is another fantastic example of Council and community coming together to protect open spaces that benefit Bayside residents, visitors and of course, the environment.

As we develop the Highett Grassy Woodland masterplan and Conservation Management Plan, we look forward to it being protected and enjoyed for many generations and will be speaking with the community about plans for the future.

If you turn to page 4 you will see a schedule of Wildflower Walks, which start in August and run throughout spring. Save the dates in your calendar and I hope to see you on one of these walks.

Councillor Hanna El Mouallem
Mayor



Cover photo: Magpie Goose
By Danny Fog

In this issue

Special features

Other articles

Blue Morning Glory

Weeds of Bayside

By Aaron Hurrell, Citywide Bushland Crew

Blue Morning Glory (*Ipomea indica*)

A long-lived perennial vine belonging to the Convolvulaceae family, Blue Morning Glory is also known as Oceanblue Morning Glory, Blue Dawn Flower and Koali awa.

Blue Morning Glory is native to areas around the world that range from warm temperate to sub-tropical to tropical climates.

This highly prized ornamental plant is grown for its beautiful, funnel shaped, coloured flowers ranging from blue to purple.

With flowers ranging from 6-8cm in diameter, its leaves are often found in heart-shapes or with three lobes.

The Blue Morning Glory is commonly found in various areas like suburban gullies, disturbed forests, woodlands and along waterway banks and roadsides.

It is well adapted to climbing over trees and shrubs, often smothering and out-competing native plants.

Known to run along the ground and produce roots from the nodes and create new runners, the best way to deal with Blue Morning Glory in an infested area is manually removing its roots from the ground; though it's easy to break apart and have small roots remain and possibly reshoot.

If the site is small or in the early stages of being infested herbicides can be effective.

Source: Wikipedia *Ipommea indica*

Love Creeper (*Comesperma volubile*) at Long Hollow Sanctuary Heathland

Wildflower Walks

Native Fuchsia (*Correa reflexa*)

Photos by Pauline Reynolds

SAVE THE DATES

Plan your Sunday spring days around these fantastic wildflower walks – a collaboration between Council and our Friends groups.

Bay Rd Heathland Sanctuary
Sundays, 2pm-4pm
27 August, 10 & 24 September, 8 & 22 October

Gramatan Ave Heathland Sanctuary
Sundays, 2pm-4pm
10, 17 & 24 September

Cheltenham Park
Sunday 3 September, 10am-12pm

Donald MacDonald Reserve
Wednesday 6 September, 9.30am-11.30am

George Street Reserve
Sunday September 17, 10am-12pm

Balcombe Park Reserve
Sunday September 24, 10am-12pm

Long Hollow Heathland Sanctuary
Sunday 24 September, 1pm-3pm

Showy bossiaea (*Bossiaea cinerea*) and Purple coral-pea (*Hardenbergia violacea*)

A new reserve for Bayside

Michael Norris
Friends of Highett Grassy Woodland

Photos by Amy Weir and Pauline Reynolds

A major milestone in the efforts to conserve the Highett Grassy Woodland was achieved on 20 April 2023 when the title to three hectares was transferred to Bayside City Council.

The site holds magnificent old gum trees along with indigenous ground plants and understorey.

This endangered vegetation – otherwise almost gone from the Sandbelt and far beyond – had miraculously survived when TS Hart discovered it in the 1930s (see the Spring 2020 *Banksia Bulletin*).

The public campaign to save the vegetation has been running for over 20 years by the Friends of Highett Grassy Woodland.

It has involved thousands of members of the community, ecologists, environmental organisations, historians, and people in national, state and local government.

Key supporters were our Goldstein MPs and Victorian Government Ministers from both major parties, together with, of course, Councillors and officers from Bayside Council.

The next steps include finalising an Environmental Management Plan to deal with some limited pollution, a Planning Scheme Amendment to zone the land for conservation, and the creation of a masterplan and Conservation Management Plan to guide work on the site and public access for the next 10 years or so.

There are wonderful grassland restoration projects underway in Victoria using modern techniques, particularly direct seeding.

Visit Grassy Plains Network website and Facebook pages for examples that we might, with expert advice, draw upon. This includes creating 'wildflower meadows' at Royal Park and native grassland restoration in the Victorian Volcanic Plains.

We are looking forward to working with the community and Council to rejuvenate the Grassy Woodland – along with a fuller celebration of this milestone.

From left to right: Friends of Highett Grassy Woodland Michael Norris and Pauline Reynolds with Mayor Cr Hanna El Mouallem and Bayside CEO Mick Cummins

Reappearance of Cranberry Heath

Words and photos by Pauline Reynolds

The Cranberry Heath, *Styphelia humifusa*, previously known as *Astroloma humifusum*, is a small pretty shrub which grows in south-eastern Australia and is not considered rare or endangered.

However, apart from a small number at Royal Melbourne Golf Club, only four plants have been observed in Bayside growing at Long Hollow Heathland in recent times.

J.H. Willis observed the shrub at Bay Road Heathland Sanctuary, Long Hollow Heathland Sanctuary, Royal Melbourne Golf Club and Sandringham Golf Links in the 1980s. It appears to now be extinct at Bay Road, but with a few small ecological controlled burns at Sandringham Golf Links, we can always hope that it may regenerate there.

This sprawling plant or ground cover hides its small bright red flowers under the prickly foliage for many months of the year. The berries then appear and ripen also to red and are sweetly edible. Like the other species in its family, it is difficult to propagate, but Julie Valentine and Jim Massin at Bayside Community Nursery have managed to successfully grow and flower the shrub. The team hopes to produce more to be reintroduced in other bushland reserves.

Will McGowan from Citywide Bushland Crew discovered a new plant at Long Hollow Heathland in late 2022. This site underwent an ecological burn in 2015 and, even allowing for its slow growth, is about 25 per cent of the size of perhaps a seven-year-old specimen. The reason for its germination? Perhaps it was the wet winter, a blue tongue lizard eating and dropping seeds, a change in the surrounding vegetation, removal of weeds and a bit of soil disturbance.

Rob Saunders pointed out, while we were photographing the Cranberry Heath flowers for this article, that continuing to protect these sensitive areas is important for little plants like this one to have the chance to appear.

Insect survey

Photos above by Belinda Raymond

Citywide held its first insect survey at George Street Reserve in conjunction with the Entomology Society of Victoria on 23 March 2023.

Photo by Belinda Raymond

Words by Belinda Raymond
Citywide Bushland Crew

Holding nights such as this is a great way to understand the level of biodiversity in Bayside.

As land managers we have a great understanding of the diversity in the Plantae kingdom, yet insects can drive their production.

As they feed on flower nectar, insects also pollinate plants helping to seed production and the growing of fruit and vegetables.

Insects are great at decomposing organic matter and breaking down nutrients in the soil, which feeds the plants.

Lepidoptera is one of the largest insect orders comprising all moth and butterfly species.

A survey of this insect group in a relatively short amount of time can give a good indication of biodiversity within any ecosystem.

Photo by Pauline Reynolds

Photo by Pauline Reynolds

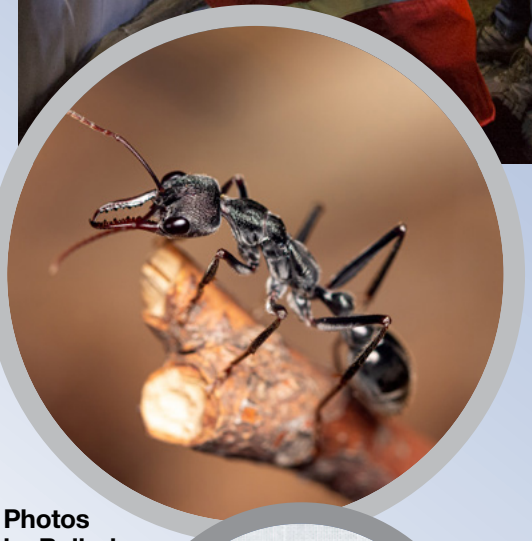
It is for this reason that we use these species as an 'indicator taxon', as its decline could significantly impact the overall biodiversity of any site.

How do we survey such a group of insects? We set up a light trap, preferably on a warm night, with a white sheet and light source. Using this method we don't need to collect the insects as they are attracted to the light; we simply observe and document them with a camera.

On this particular night we set up two sheets, one with a 250w globe and the other with a small, manufactured globe that emits UV radiation, corresponding with the sensitivity peaks of most nocturnal insects.

The insect survey was a great success, documenting a mix of 65 species, comprising mostly of moths but also flies, ants, wasps, lacewings and mosquitos.

You can take a look at what we found documented in iNaturalist.



Photos by Belinda Raymond

Photo by Belinda Raymond

Photo by Belinda Raymond

Interesting
local bird sightings

Observed at Yalukit Willam Nature Reserve, Elsternwick

Photos by Danny Fog

Gang Gang Cockatoo (*Callocephalon fimbriatum*)

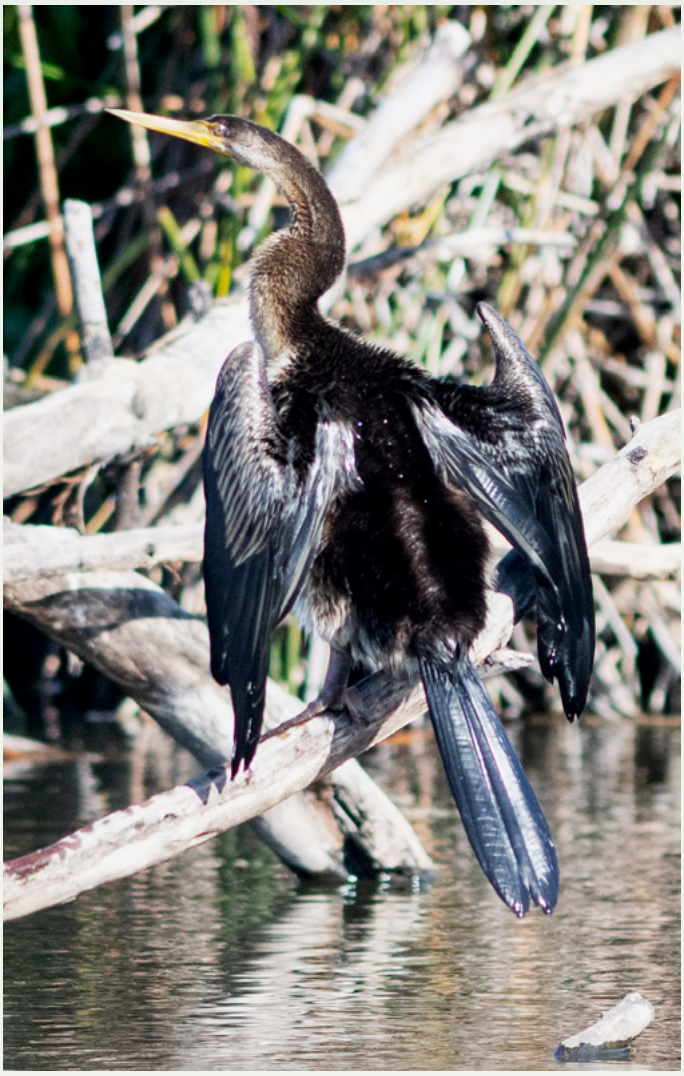
This family of Gang Gangs have been delighting visitors to the reserve with their playful antics. The adult males have a distinctive scarlet red head and crest and they can be located in their favourite food trees by the sounds of feeding and falling debris.

Brown Quail (*Coturnix ypsilophora*)

This Brown Quail was sighted sheltering among the sedges by Pond 2 and marked its first official bird survey record.

Eastern Great Egret (*Ardea modesta*)

The Eastern Great Egret is the largest of the Australian egrets, and this one has been happily fishing in the ponds at YWNR.



Australasian Darter (*Anhinga novaehollandiae*)

This bird is found in wetlands and sheltered coastal waters and prefers smooth, open waters for feeding, with tree trunks, branches, stumps or posts fringing the water for resting and drying its wings. It has found an ideal home at YWNR.

Observed at Red Bluff, Black Rock

Horsfield's Bushlark (*Mirafra javanica*)

Words and photos by John Eichler

This Horsefield's Bushlark was spotted wandering amongst the grasses and weeds near the cliff top of Red Bluff. This smallish bird is about the same size as a House Sparrow and its colours and markings are like a female House Sparrow.

This is an infrequently observed bird in Bayside with only two other records in the last 30 years. Local conservationist Michael Norris has been collating local bird records for decades and provided these details.

- One bird was seen at Ricketts Point by Moira Longden and Michael Norris in November 1995.
- Up to 60 birds were seen on the Elwood foreshore and upstream to the former Elsternwick golf course by Gio Fitzpatrick in September 2012.

Michael also advises that Gio sees Horsfield's Bushlarks in spring most years on the Elwood foreshore.

Observed on the Beaumaris foreshore

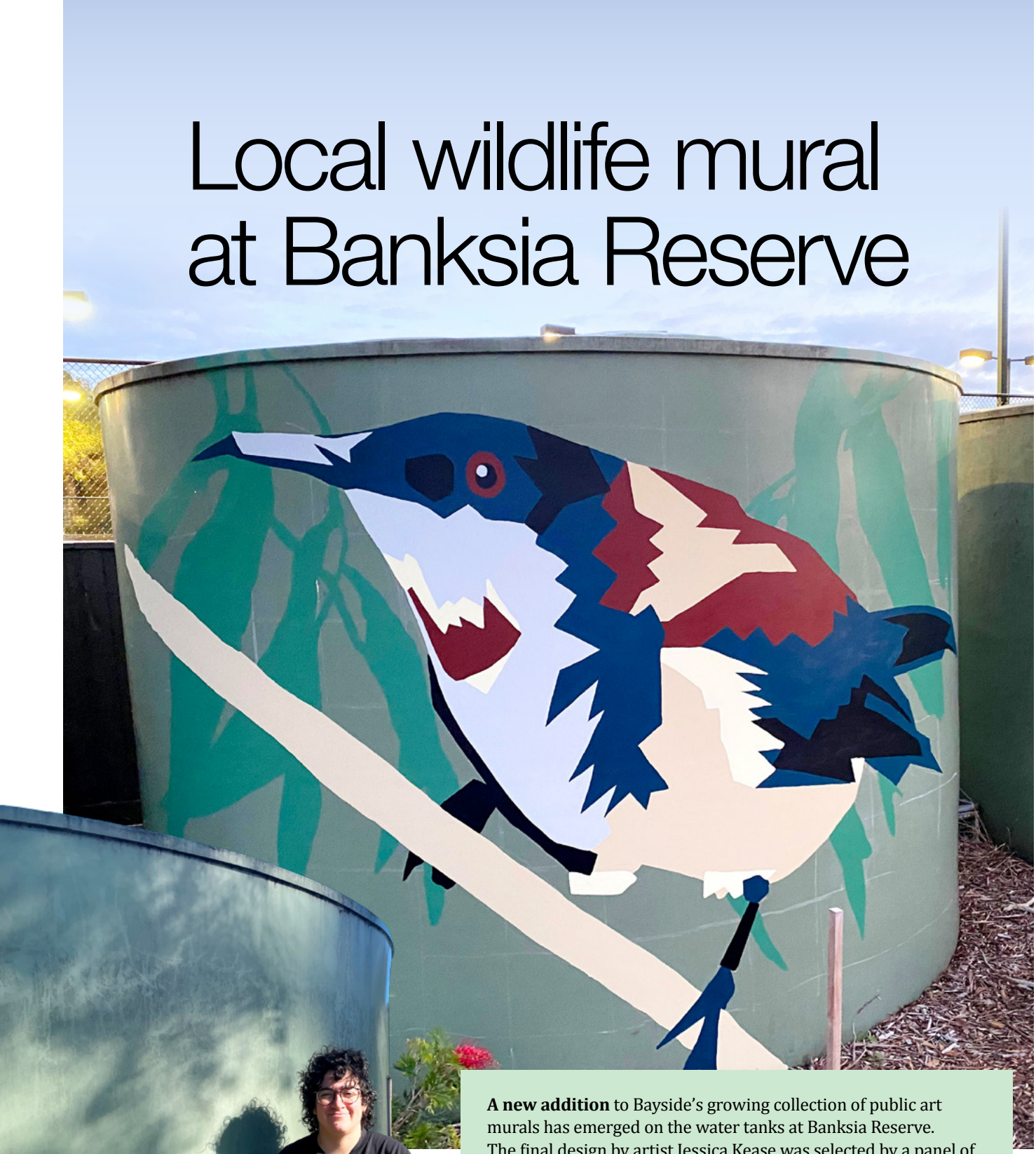
Spiny-Cheeked Honeyeater (*Acanthagenys rufogularis*)

Words and photos by John Eichler

The first sighting of the Spiny-Cheeked Honeyeater was between Ricketts Point and Table Rock Point and the second was opposite Wells Road.

These sightings follow a report, posted by Sean Dooley on the Birdline Victoria website, of a pair of birds at Ricketts Point between 13 and 24 April. While this is an infrequently observed bird in Bayside, a Birdline Victoria moderator commented that Spiny-cheeked Honeyeaters do roam at this time of year.

Local wildlife mural at Banksia Reserve



A new addition to Bayside's growing collection of public art murals has emerged on the water tanks at Banksia Reserve. The final design by artist Jessica Kease was selected by a panel of members from the Bayside Arts & Gallery Advisory Committee and staff from Council's Open Space and Arts & Culture units. It depicts two species of birds often seen locally in Bayside – the Eastern Spinebill and Rainbow Lorikeet.

Of her design, Jessica said: *"I liked the idea of the background blending into the surrounding landscape with the birds being the pop of colour that catch your eye. I felt like this design would fit perfectly and specifically chose the birds that are native to the area."*

The water tanks are located at Banksia Reserve in Beaumaris, and can be seen adjacent to the pavilion near the tennis courts – best accessed from Tramway Parade.

Left: Artist Jessica Kease

A visit from **Maggie Goose**

Photo by Danny Fog

By Natalie Davey
President Yalukit William Nature Reserve

A recent visit of Magpie Geese to Yalukit Willam Nature Reserve is a testament to the incredible memory animals have for Country, or at the very least a wonderful detective skill in discovering newish wetland habitats.

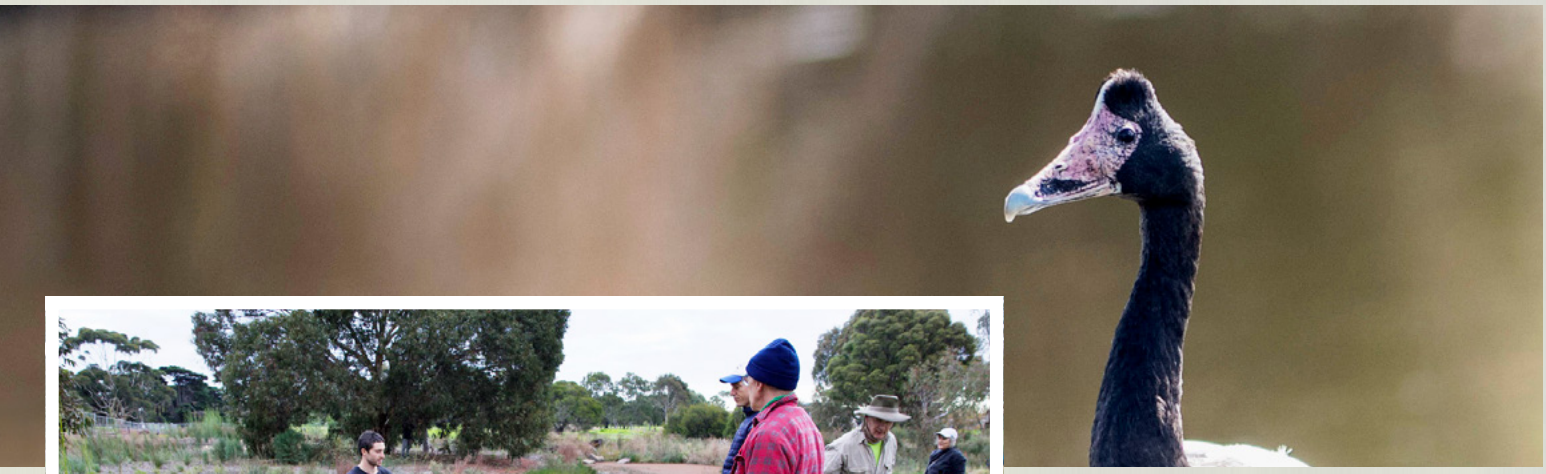
It highlights how important wetland revival projects are and gives cause for the community to celebrate. N'arwee't Carolyn Briggs, Boonwurrung Elder, was thrilled to hear the news. Such a positive sign of life returning to Country.

The Magpie Goose, known as *Anseranas semipalmata*, is the sole living representative species of the family Anseranatidae. This is a very old species, emerging around 67 million years ago – a true living fossil!

They love to eat mostly vegetation such as dry grass blades, grass seeds, spike rush bulbs and wild rice.

While this waterbird is commonly found now in northern Australia and southern New Guinea, it was once widespread in southern Australia as well. However, due to the drainage of wetlands where they once bred and over hunting by colonial settlers, the species all but disappeared from Victoria. By the early 1900s the Magpie Goose was declared to be extinct in Victoria. The behaviours of the colonists contrast with the long and sustainable relationship held by First Nations people and they are still valued as a food source in the northern parts of Australia.

Photo by Danny Fog



YWNR working bee – planting indigenous plant species adjacent to the Chain of Ponds.

Efforts have been made to reintroduce the Magpie Geese to certain areas, including the Bool Lagoon between Penola and Naracoorte. However, in Victoria, the species was listed as near threatened on the advisory list of threatened vertebrate fauna in 2007, and it is also included in the *Flora and Fauna Guarantee Act* list of threatened fauna. There is a natural breeding population now in Tower Hill in south-west Victoria but biologists are still unclear if it is self-sustaining. The original Southern Magpie Goose may be lost to us forever as these large, black and white water birds with strong legs, partially webbed feet and a prominent lump on the forehead are from reintroduced birds taken from or flown here from northern Australia.

The migration patterns of the Magpie Geese are fascinating. Before the early 1900s, these geese were not uncommon in Victoria. However, due to habitat loss and hunting, they were pretty much wiped out. Reintroduction efforts in the 1960s and 1970s led to sightings of small flocks in wetlands across the west of the state. Over the years, there have been reports of varying flock sizes, with the largest being approximately 9,000 birds. While flock sizes in Victoria have declined since 2010, sightings of around 100 birds at various locations are still common.

The arrival of large flocks in Victoria coincided with the end of a drought in 2010 to 2011, indicating favourable conditions in the state. However, it remains a mystery where these flocks of 400 to 1,000-plus Magpie Geese originate from. While records indicate their presence in New South Wales, Queensland and the Northern Territory, there are no reports of their migration path from north of the Murray River before their arrival in southern Victoria.

The ability of these large black and white geese to travel across multiple states without being widely reported raises intriguing questions. It is possible that they travel at night and spend limited time on the ground during the journey. Another possibility is that they undertake non-stop flights, allowing them to cover great distances in a short period. These mysteries surrounding their migration patterns and behaviour only add to the allure and wonder of these handsome birds.

Regardless of origins, Magpie Geese visiting the Yalukit Willam Nature Reserve is an exciting development. Over our last two monthly bird surveys, there has been an increase in bird populations in the Chain of Ponds, particularly survey areas E and F, which have undergone significant revegetation efforts.

This achievement has been helped along by the dedication of numerous volunteers who laboured tirelessly alongside Bayside contractors and officers to propagate, plant, and protect the vegetation, enabling it to reach a stage of maturity that can support diverse wildlife.

Such observations highlight the importance of ongoing monitoring and documentation to understand and appreciate the biodiversity within the wetland ecosystem that is developing in the reserve. It also marks a turning point in the fact that in a relatively short time, the newly established Chain of Ponds is now attracting more biodiversity that the original golf course pond. It's incredible to think that not very long ago it was just an open space with a few trees! New visitors including the Pink-Eared Duck have increased the bird species count in the reserve to 124. Gio Fitzpatrick has been keeping tabs for many years and we keep his tally on our Facebook page. Twitchers are now alert to the growing biodiversity and have been flocking from all over to catch a glimpse of the next exciting visitor.

The return of the Magpie Geese to the Yalukit Willam Nature Reserve, albeit fleetingly, and to other wetland areas in Victoria, is a positive sign for conservation efforts. It demonstrates the importance of protecting and restoring wetland habitats. By preserving and regenerating this local urban ecosystem, we provide a home for diverse species, connect with Country and Culture and can, as a community, be witness and be involved in the process of this wonderful regeneration project of a neglected urban waterway.

I wonder who will be our next visitor?

Too much of a good thing?

By Rob Saunders
Convenor, Friends of Long Hollow Heathland

Before European settlement, what we now call Bayside had a patchwork of different vegetation types. Inland from the sandy beaches and coastal dunes a variety of wetlands, heathlands and grassy woodlands would have been evident. In many places the pattern of the original vegetation was based around sand dunes running roughly parallel to the shore of the Bay.

But natural systems are intrinsically dynamic, so the detail of the vegetation and the habitats it created would also have changed with the cycles of the seasons.

Longer-term cycles of droughts and floods would also have come into play, as would the cultural burning practices of the Bunurong People of the Kulin Nation.

Most of that natural environment has disappeared in the last 200 years. The most rapid change has been due to the development of our suburbs, and much of that has occurred in my lifetime. But some tiny remnants can still be seen.

The area reserved as Long Hollow Heathland Sanctuary originally included several pre-1750 vegetation types, as can be seen from the pre-1750 Ecological Vegetation Class map available online in NatureKit.

Some of this information is known from early records, while some has been interpreted from remnant vegetation and other evidence. Zooming in to the area around the intersection of Balcombe and Reserve Roads in Beaumaris (see Figure 1), the blue SSW area was once Sedgy Swamp Woodland, the yellow-green GWm was a mosaic of Grassy Woodland and Damp Sands Herb-rich Woodland, and the orange-brown HWm areas were a mosaic of Sand Heathland and Heathy Woodland.

A critical element shaping the vegetation, particularly at Long Hollow, was, and still is, water. Within the lifetime of older residents still living in the area, the main oval at Beaumaris Secondary College was a swamp. It was filled in with sand when Beaumaris High School (now Sandringham Secondary College) was built in 1958 (as was the oval at Balcombe Park nearby).

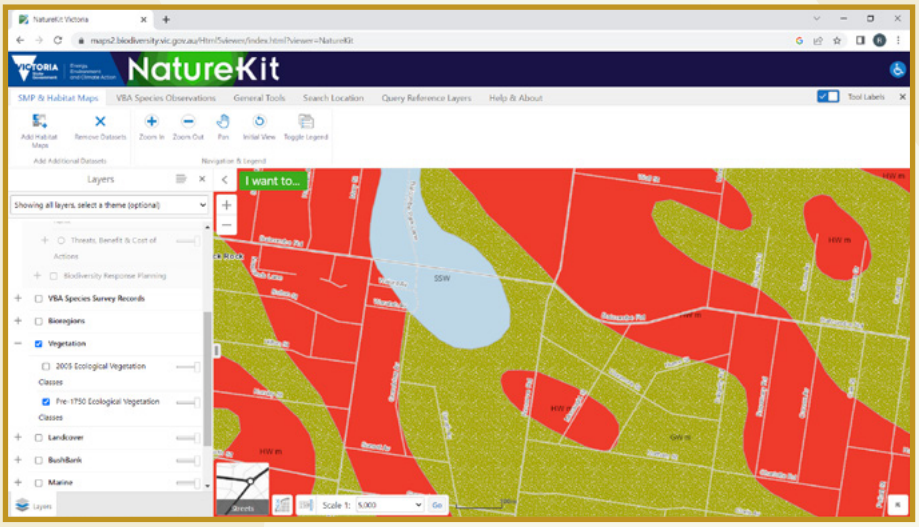


Figure 1. Pre-1750 EVCs near Long Hollow

More recently, the hydrology of this area was further altered when storm water drains in Balcombe and Reserve Roads were enlarged to capture and divert run-off and prevent flooding in residential areas to the south. The Millennium Drought exacerbated this loss of moisture from Long Hollow. Water was no longer seen under the boardwalk during winter and some of the local plants that rely on ample moisture began to disappear. Those adapted to very dry conditions survived, but the overall richness and complexity of Long Hollow began to deteriorate.

One solution proposed at the time was an artificial wetland. When Beaumaris Secondary College (BSC) was being designed, the Friends of Long Hollow met with the project architect and the concept was implemented. Rainwater run-off from the car parks and multi-purpose pitch is now collected and channelled to a wetland in the school grounds right next to Long Hollow.

Figure 2. *Gonocarpus micranthus* (Creeping Raspwort) flourishing in a regeneration area at Long Hollow

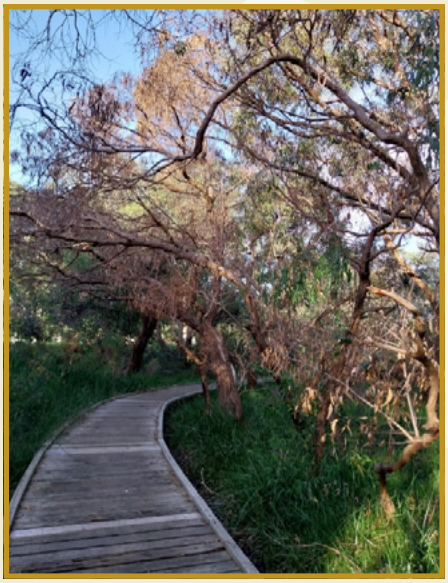


Figure 3. Die-back of *Eucalyptus viminalis* ssp. *pryoriana* (Coast Manna Gum) at Long Hollow

From there it seeps into the ground and effectively replenishes the water table.

Since the BSC wetland first filled in 2017, some moisture-loving species have returned. One example is Creeping Raspwort (*Gonocarpus micranthus*), which hadn't been seen at Long Hollow for 20 years (see Figure 2). Some trees, such as *Eucalyptus ovata* (Swamp Gum), *Acacia melanoxylon* (Blackwood Wattle) and *Viminaria juncea* (Golden Spray) are also loving the moist conditions and growing better than they have for many years.

But there have also been unintended consequences. In the last few months, we have noticed die-back in some of the mature Coast Manna Gums (*Eucalyptus viminalis* ssp. *pryoriana*) (Figure 3) and several other species near the boardwalk. We think the problem is that the soil in places is now too wet for too much of the year. Instead of a seasonal cycle of wet and dry, parts of Long Hollow are now wet for most of the year.

The challenge will be to manage the water seeping into Long Hollow from the BSC wetland in a way that more closely replicates a natural pattern. Hopefully that will ensure the entire diversity of indigenous vegetation found at Long Hollow (approximately 120 different plant species including some that are rare on a metropolitan scale) can flourish long-term.

Note: Council officers are currently in discussion with Beaumaris Secondary College regarding the wetland drainage into Long Hollow Heathland. We are looking forward to working with the school to ensure there are no long-term detrimental impacts to the heathland from changed hydrological conditions.

Habitat corridor works complete

Creation of the habitat corridor between the Tulip Street Pond and Sandringham Golf Course has recently been completed as part of the associated landscape plan for the new basketball stadium, which is under construction.

Friends of Native Wildlife Inc (FONW) raised concerns with Council during community consultation around the new stadium development about the movement of native fauna between the golf course and the pond.

A variety of terrestrial, semi-aquatic and arboreal animals move between these two sites including Wood Ducks, skinks, geckos and frogs, which also use the area for shelter, breeding and feeding.

Council has ensured the retention of an important link between the golf course site and Tulip Street Pond will be retained by creating a habitat corridor.

The large swale incorporated into the design serves a dual purpose to take any overflow from the Tulip Street Pond away from the new building while creating ephemeral habitat for local fauna.

The habitat corridor has been planted with indigenous plants and will provide improved biodiversity outcomes for native flora and fauna.

The Tulip Street Pond has also had a minor makeover with the former sleeper wall edge of the pond removed and replaced with a more natural looking sloped interface between the reserve and the pond. This area will soon be planted out by FONW. Please register your attendance via this link if you would like to come along and join in!

Council will continue to undertake weeding and other minor vegetation improvements over the coming months to enhance the aesthetics of the Tulip Street Reserve precinct, and create improved opportunities for the community to experience the natural character of this area.

The Habitat Corridor Landscape Plan for the basketball stadium aims to:

- improve Tulip Street Reserve and pond environs
- protect and potentially relocate existing wildlife (burrowing frogs) during construction of the basketball stadium
- provide a suitable landscape plan for wildlife to continue to access and flourish at the site.

George Street Reserve sightings

Photo by Belinda Raymond, Citywide Bush Crew

There were almost daily sightings of a single Buff-banded Rail (*Gallirallus philippensis*) darting in and out of the grasses and shrubs within George Street Reserve throughout May. This is not a common sighting as there is no water source within the reserve.

The Buff-banded Rail is considered a water bird and often seen in dense vegetation bordering different types of wetlands. They are quite a shy bird, mostly silent, which makes them hard to spot unless breeding, when they make a loud creaky squeak. They forage on the ground for insects, worms, fruit, seeds, and other vegetable matter in the morning or evening. Nesting in grasses between September and February, surprisingly the young leave within 24 hours but remain with the parents.

Pauline Reynolds photographed this magnificent web on a recent Saturday morning after the fog lifted. While there is no sign of a spider, they are tiny and might be hiding, only to come out at night.

2023 controlled ecological burn at **Balcombe Park**

Words by Jo Hurse
Citywide Bushland & Nursery Operational Supervisor
Photos by Pauline Reynolds

Citywide Service Solutions held a controlled ecological burn on Tuesday 11 April 2023, at Balcombe Park Reserve, Beaumaris.

Each year Citywide, on behalf of Bayside City Council, conducts ecological controlled burns in the heathland reserves to stimulate the soil stored seed.

The surrounding Tea-Tree (*Leptospermum laevigatum*) and Coast Wattle (*Acacia longifolia* subsp. *sophorae*) is cut down and used as the primary source of fuel for the fire.

The area of this controlled burn was approximately 4000m^2 plus firebreaks. A total of 23 Citywide staff were stationed at all paths leading into the park to ensure the community was kept a safe distance away. Staff were positioned at all four flanks, on water trucks, roaming the reserve for spotting, taking weather readings and the important lighting crew.

While the weather conditions on the morning of the burn were perfect – nice and cool with a slight wind – the previous rain over Easter, and the large Cypress trees in Royal Melbourne Golf Club were the big challenges for the day!

When it came to ignition at around 10am, the fuel was not catching, or it would catch and burn out. The fuel was damp, and the Cypress trees cast shade on the ignition site until after 10am. After so much work, however, we were not giving up, and eventually we got it going.

Ecological burns are known to be highly beneficial to many Australian ecosystems. This is particularly relevant to the heathland vegetation communities of which Balcombe Park Reserve is a part. In many cases, plants from heathland vegetation communities require fire to survive. Without the natural fire regime to stimulate plant cycles these communities can senesce and die, causing a drop in plant diversity.

The burn site was patrolled overnight by the Bushland crew for flare ups and the following weeks were spent scorching the unburnt ground in the firebreaks when the weather permitted. The area has also been fenced to prevent any disturbance to the ash bed and emerging seedlings. After this year's autumn and upcoming winter rains the indigenous seedlings will emerge.

This is an exciting time, and we look forward to observing and recording what locally indigenous plant species regenerate. It is rewarding work to know that you are contributing to the health and preservation of Bayside's bushlands.

Culture corner

Meeting Place

I leave loneliness in an empty house
Of late winter lockdown,
Drive to the outer limits of our prescribed boundaries
To walk through gate of Long Hollow Heathland.
Reserve Road's car exhaust, traffic noise
Give way to wrens' chirps, frogs' glug-glug,
Whispers in branches above.
I head to wooden walkway
Above damp swamp.
A colourful sign board catches my eye.
A shard of recognition strikes my body.
I twirl around, silently shout with surprise:
"My great, great grandparents are here with me!"

I read the information board again more carefully:
"Early settlers James and Susannah Moysey recorded the earliest descriptions
Of the vegetation in Black Rock, Beaumaris, Cheltenham and Mentone in 1844".
With Susannah's fresh gaze I turn to slowly share her delight
In small balls of cream and vivid yellow wattle.
I follow creeping mistletoe along fence line.
I hear my great, great grandmother's voice calling me across the decades:
"The land was lightly wooded with gum and wattle trees.
Heath predominated among the native grasses.
And in springtime the place was beautiful with wildflowers",
Her diary records.
I walk further along sandy track.
Shy Nodding Green Orchids among the grasses
Give way to sea of purple Chocolate Lilies.
Elegant Trigger plants invite my touch,
While Milkmaid's Purse demurely hides behind the Drooping Sheoak.
I breathe in fragrance.

Thankyou, great, great grandmother, for your rich legacy.

Susannah, I only ever encountered you once before.
When in 1964, as teenager in formal hat and gloves,
I joined my family with father, George Moysey Wilson,
At the solemn clan gathering
Unveiling plaque on the Memorial Cairn, Beach Road.
I traced your name on brass plate.
Hammered to stone edifice.

Below: "Spot of the home of the first white settlers of this locality."
You would have gazed through small window of your wattle and daub cottage,
Seen changing colours of sea,
Heard screech of cockies, smelt salt spray on the south easterly,
Walked along sandy beach, marvelled at middens hidden by rocks.
Records say you rode boundary fences at night
To check on sheep raids from the Boon Wurrung people
When gold lured James north for a period, leaving you with small children.

I have mused at what your colonising cost original inhabitants.

I now have met your two selves:
Your eloquent appreciation of your new natural world,
Your callow dispossession of the first settlers.
My pride, my guilt.
Irreconcilable.

I return to my empty house
Grounded, with an uneasy peace.

Roslyn Evans
2023

Book Review

By Sue Forster
Field Naturalists Club of Victoria

Keith Seifert's *The Hidden Kingdom of Fungi* comes at a time when mycology has established cult status in popular science publishing. His focus on relationships between humans and microscopic fungi, chiefly moulds and yeasts, differentiates this book from precursors such as Merlin Sheldrake's *Entangled Life* and Michael Lim and Yun Shu's *The Future is Fungi*. There are inevitably overlaps, especially in chapters describing how humans use fungi for food processing and brewing and are developing fungal technologies for creating textiles and buildings.

Siefert is an erudite and imaginative storyteller whose book is aimed largely at a nonscientific audience but contains details of research that will interest more informed readers. His writing is entertaining, but his scientific credentials are solid. According to his biography: 'Seifert was president of the International Mycological Association, an executive editor of *Mycologia*, and an associate editor of several other scientific journals.' His research career, working for organisations such as Agriculture and Agri-Food Canada, spans five continents over a period greater than 40 years. He has in-depth knowledge of fungal toxins and diseases affecting plants and animals, disturbing threats now exacerbated by climate change.

Seifert describes his unorthodox approach to fungal writing as 'unapologetically fungopomorphic' or 'mycopomorphic'; he asks readers to imagine 'the world from the point of view of a fungus' where fungi are 'both heroes and villains— humans are the supporting cast' (p. 10). His dramatisations will undoubtedly enthuse myco-novices to read on.

Somewhat perversely, Siefert begins by apologising for 'scientific names being a necessary evil' (p. ix) but fails to provide a glossary of scientific terms used throughout the book. These do, however, appear in the extensive index. The book is illustrated with line drawings and includes a useful appendix on fungal classification relating to those fungi mentioned in the book. It also has good endnotes and a large bibliography.

The Hidden Kingdom of Fungi: exploring the microscopic world around us
by Keith Seifert

Publisher: University of Queensland Press, St Lucia, Queensland, 2022. 276 pages, paperback, line illustrations. ISBN: 9780702265792. RRP: $32.99.

The book is structured in three parts. Part 1 'The Hidden Kingdom' looks at fungal evolution and a sliding scale of symbiotic fungal relationships ranging from mutualism through to parasitism and pathogenic invasion. Part 2 'The Fungal Planet' encompasses forest ecology, farming, fermentation and its uses, fungi in our built environment, and human mycobiomes. Part 3 'The Mycelial Revolution' examines new mycotechnologies and how humans and fungi can coexist to establish a more sustainable planet.

Siefert's content is therefore broad ranging, spanning fungal history, morphology, DNA, chemistry, and bioethics in relation to fungal roles in both natural and artificial ecosystems (such as our homes). He is well-equipped to write about the threats and benefits of microbial fungi to food production and industrial-scale farming (described as an unbalanced ecosystem) and their implications for human health. Underlying his good humour is a serious message. He warns that present threats vastly outweigh benefits and are likely to get worse unless farming develops more complete, balanced ecosystems.

Human interventions can easily produce unintended consequences; for example, crop fungicides are now known to alter human resistance to fungal pathogens. To date, up to 400 species of fungi have been detected inside inherently unstable human microbiomes (p. 158). Although only a small number are harmful, we possess few effective antifungal drugs, largely because humans are too genetically similar to the fungi that produce them: 'what is toxic to them is toxic to us' (p. 172).

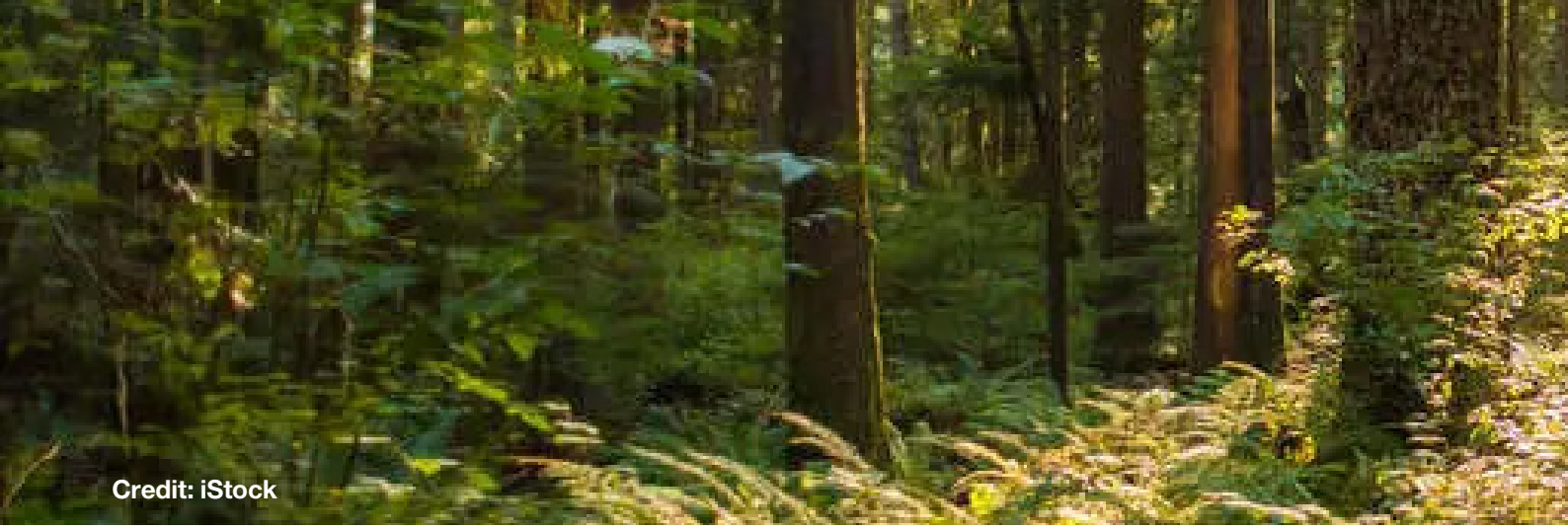
The Hidden Kingdom of Fungi richly illustrates the extraordinary complexity and flux of fungal-plant and fungal-human relationships. Siefert notes (p. 36):

> *When you observe behaviour in nature, it's hard to draw a firm line between cooperation and competition. Any agreement between two creatures sharing resources is always under renegotiation.*

Perhaps this is why writing about fungal 'collaborators' (e.g. pp. 177–179) makes me uneasy. As in this and other recent popular science books, experimentation into growing and processing fungal mycelium for mycomaterials, for building blocks, packaging, furniture and textiles, is frequently described as fungal 'collaboration'. But is this really the case if the same fungi are killed on an industrial scale? Mycomaterial technology is undoubtedly an exciting and revolutionary idea for creating a more carbon neutral planet but the language of collaboration seems misapplied.

There are other passages in this book where fungal-human resource 'negotiations' appear more mutually life-sustaining, such as in the sections on fermentation, biofuels, myco-remediation, and fungal alternatives to pesticides and fertilisers used in agriculture. In closing, Siefert recognises the role that international treaties must play to i) counter human power imbalances in the lucrative field of bioprospecting (p. 210, 1992 Convention of Biological Diversity) and ii) sustain 'healthy, productive and resilient ecosystems' on a global scale (p. 216, One Health Movement, World Health Organisation).

This a thought-provoking book that should attract a broad readership. It makes good bedtime reading but has sufficient depth to reward multiple closer readings. It is also a great introduction to a highly complex subject that was once only accessible to trained mycologists.



Credit: iStock

'Nature prescriptions' can improve physical and mental health: study

By Maddie Massy-Westropp
Source: UNSW Newsroom

According to new research from UNSW Sydney, a dose of the outdoors may be what the doctor ordered.

Imagine that your doctor prescribes you a new treatment. It's pleasant and enjoyable, and you can have as much as you want. Potential side effects include spontaneous euphoria and being in a good mood. Not to mention, it's free and available all around you.

It's not a drug or some other medical procedure that your doctor has recommended. Instead, it is a 'nature prescription' – a recommendation to spend time in nature.

Researchers from UNSW Sydney assessed international evidence for nature prescriptions and their ability to improve health. They analysed 28 studies that tested nature prescriptions in real-world patients. This research was led by Professor Xiaoqi Feng from UNSW Medicine & Health and Professor Thomas Astell-Burt from the University of Wollongong, who are the Co-Directors of the Population Wellbeing and Environment Research Lab (PowerLab).

The systematic review and meta-analysis, published today in *The Lancet Planetary Health*, found that nature prescriptions provided both physical and mental health benefits. Patients had reduced blood pressure, as well as lower depression and anxiety scores – and they had a higher daily step count.

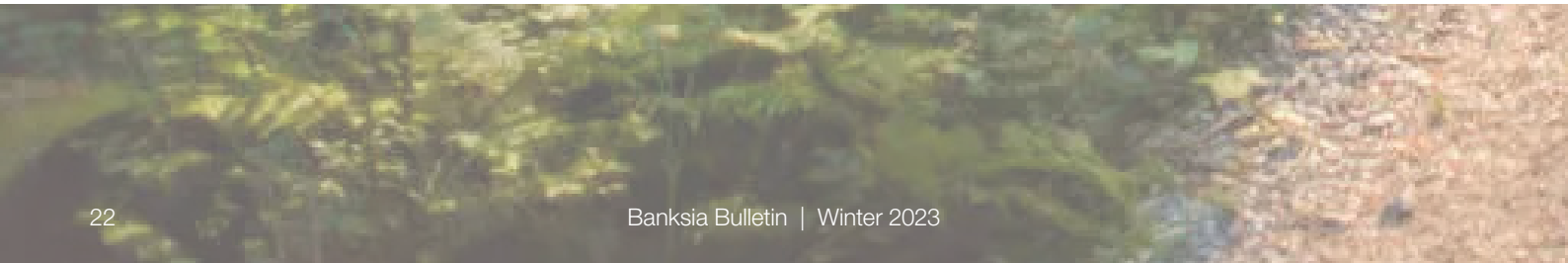
"The evidence shows that nature prescriptions can help to restore and build capacities for better physical and mental health. What we need now is to work out how to make nature prescriptions happen in a sustained way for those people with high potential to benefit, but who currently spend little time in nature," said Prof. Feng.

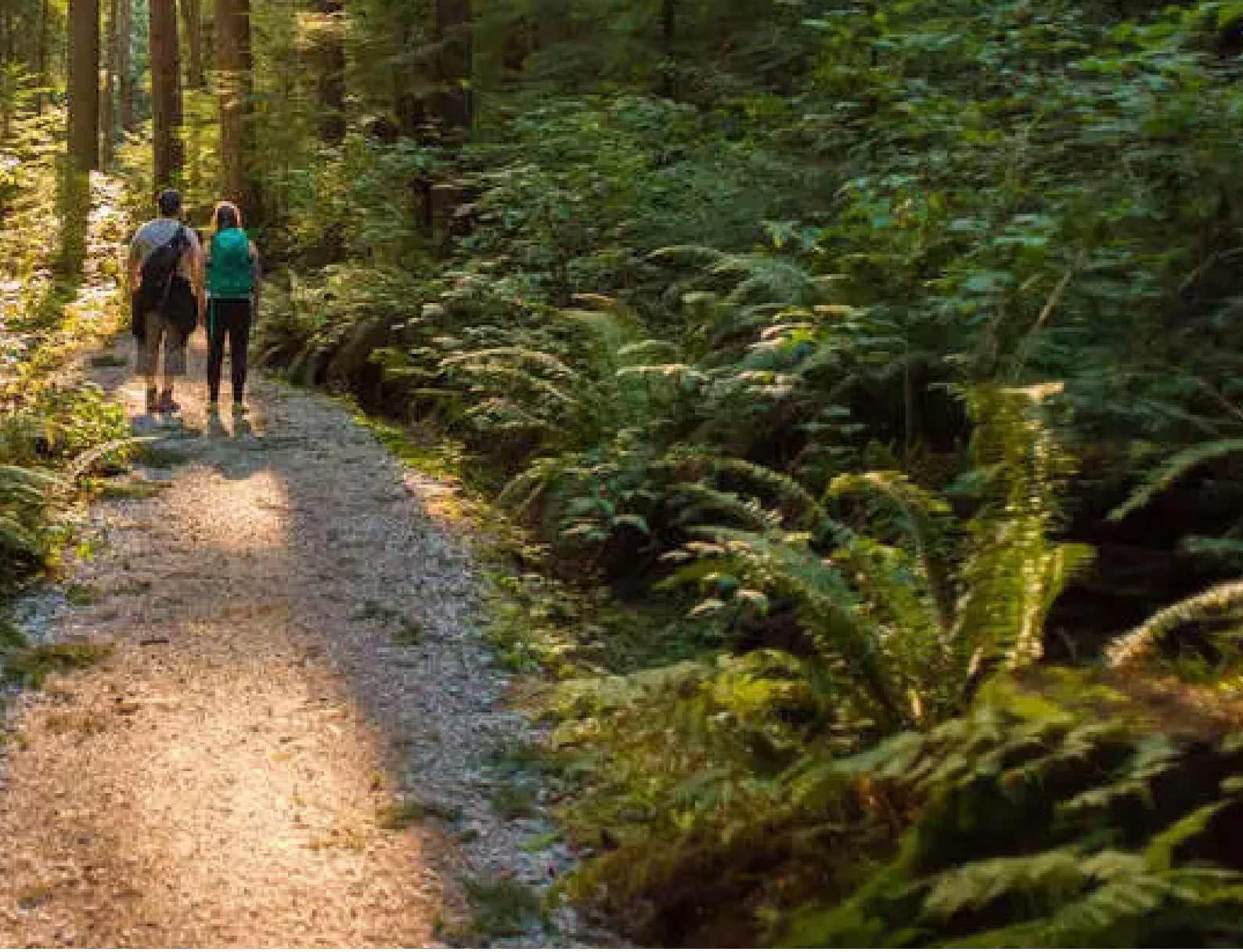
Nature makes us healthier

Research shows that contact with nature reduces harms, including those from poor air quality, heatwaves, and chronic stress, while encouraging healthy behaviours such as socialising and physical activity. This can help to prevent issues including loneliness, depression and cardiovascular disease.

"This study is built upon a long-term program of research that we are doing, where we show contact with nature – and trees especially – is really good for strengthening mental and physical health across our lives," said Prof. Feng.

Previous research by Prof. Feng shows that living close to certain types of green space can improve health. For example, in a study of almost 47,000 adults in New South Wales (NSW),





those living in areas with 30 per cent or more tree canopy reported better general health and reduced psychological distress. This research has informed the City of Sydney's $377 million strategy to reach 40 per cent green cover by 2050.

"But even if you have a high-quality green space like a park nearby, it doesn't mean that everyone will visit and benefit from it," said Prof. Feng.

"How can we encourage and enable people to (re)connect with nature? That's where the idea of a nature prescription comes in."

Taking nature prescriptions mainstream

Nature prescriptions are emerging as a supplement to standard medical care. For example, the UK Government recently invested £5.77 million in a pilot program for 'green social prescribing' and Canada has a national nature prescription program.

In Australia, there is growing public interest in nature prescriptions. A recent survey of Australian adults led by Prof. Feng showed that over 80 per cent of people were receptive to the idea.

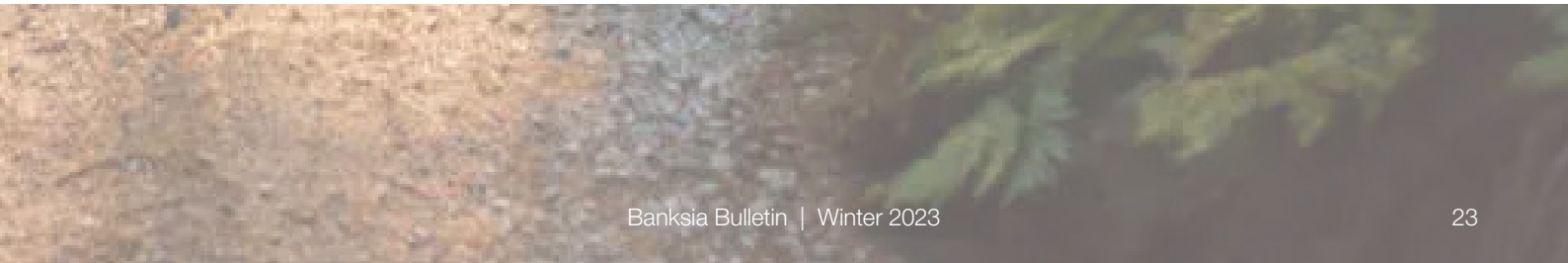
However, there are no large-scale nature prescription programs in Australia yet. More research is needed to understand how nature prescriptions could be implemented in our local context.

"So how long should the nature prescription be for? What should be in the prescription? How should we deliver it, and by whom? These questions don't have firm answers yet," said Prof. Feng.

"If we want nature prescriptions to become a national scheme, we really need to provide the evidence."

It's also important for nature prescriptions to be accessible to all Australians. Previous research from Prof. Astell-Burt and Prof. Feng has shown that low-income communities are least likely to have access to green space. Yet, these communities are more at risk of chronic health issues like type 2 diabetes, obesity and cardiovascular disease.

"We don't want nature prescriptions to be a luxury item for the rich who already have access to beaches and a lot of high-quality green space," Prof. Feng said. "We want these benefits for everyone."



Victorians value nature

Science that helps all Victorians take action to protect biodiversity

Credit: iStock

Source: Arthur Rylah Institute

Victorians are passionate about the environment, and many are already playing a role in protecting biodiversity. However, more needs to be done, and soon, so we as a community can help Victoria's natural environment.

Evidence shows that people who connect with nature are more likely to value nature and take action to protect the environment. Despite this, there has been a large gap in social research to inform how governments and others can support all Victorians to do more. To address this gap, ARI's social researchers are leading a program of work to research, test and track the best ways to help Victorians value nature.

"Victorians value nature" is one of the overarching goals of the Victorian Government's 20-year Biodiversity Plan: Protecting Victoria's Environment – Biodiversity 2037.

This goal has two targets to reach by 2037:

- All Victorians connecting with nature
- Five million Victorians acting to protect the natural environment.

ARI is helping to unite the resources and expertise of many groups to collectively work towards these targets. We are working with state and local government, nature-based agencies, Traditional Owners and Aboriginal communities, Victorian and international research groups, and community groups to develop and embed best-practice behaviour change approaches.

Establishing a foundation of knowledge and partnerships

Since 2017, ARI has been establishing a foundation of knowledge and partnerships to guide how we help Victorians to connect with and act for nature. This work is in partnership with many experts working in the nature-based sector and includes:

- Fostering collaboration with more than 15 partner networks and working groups, and a developing a community-of-practice that includes agency leaders, practitioners and behaviour change specialists.
- Establishing a baseline to understand how Victorians connect with and act for nature with the 2018 Victorians Value Nature – Foundation Survey. Now an annual survey, it tracks progress for the Biodiversity Plan 2037 – Implementation Report.
- Developing expert guidance to determine how Victorians can act to directly protect biodiversity – known as "priority behaviours".
- Creating an evidence-based tool for measuring connection with nature, the "CN-12" in 2020.
- Undertaking behaviour change research on attitudes, perceptions, and barriers around priority behaviours, including cat containment, dog leashing and understanding how Victorians' access to nature was influenced during the COVID-19 pandemic.
- Publishing a synthesis report of ARI and partner insights and recommendations to better understand, communicate, influence and create opportunities for connecting and acting for biodiversity (2017-2021). See the following technical report for more information (PDF).

Credit: iStock

Credit: Victoria Government

Researching, testing and tracking progress towards the targets

ARI is now collaborating with many groups to research, test and track what we're continuing to learn about people's connection to nature and how we might influence Victorians to take action to protect biodiversity. Our work outlined below includes social research and applying insights to behaviour change projects, and supports the Biodiversity Plan 2037 in several ways, including:

All Victorians connecting with nature

- The annual Victorians Value Nature Survey measures and tracks how Victorians are connecting with and acting for biodiversity. It also provides insights to inform further social research efforts and the design of programs to encourage Victorians to take action to protect biodiversity.
- The annual Victorian Nature Festival is co-developed with major nature-based programs to highlight opportunities for Victorians to connect with and act for nature.
- An ARI research project, which is seeking to continually learn from participants in the Victorian Nature Festival, is growing our understanding of how to make nature experiences meaningful, accessible, and incorporating Aboriginal knowledge, for all Victorians.

Five million Victorians acting to protect the natural environment

- An Environmental Volunteering Program is helping volunteers to do more for nature when, where and how it suits them.
- A Citizen Science Strategy is aiming to increase public participation in data collection for ecological research. See the following technical report for more information (PDF).
- ARI social researchers advise programs encouraging actions for biodiversity to co-develop and embed best-practice approaches. For example, throughout 2022-23 we have supported the Port Phillip Bay Fund, Open Space Programs and the Southern Right Whale identification project.

Importantly, ARI is working with existing and potential partners to establish ways of growing, linking, informing, measuring and tracking all activities across Victoria which contribute to the Biodiversity Plan targets.

This work toward the Victorians Value Nature targets is funded by the Victorian State Government's Department of Energy, Environment and Climate Action.

For more information contact: Dr Kate Lee: kate.lee@delwp.vic.gov.au

To join this work or let us know what you're doing that might contribute to the targets, please complete this form.

Spend time in nature
People who spend time in nature are more likely to act for nature

Get involved
Volunteer for nature, maybe try some Citizen Science

Be a champion for nature
Inspire family and friends with your great nature experiences

Nuture at home
Plant native plants, or keep a wildlife garden

Be a responsible pet owner
Keep your cat safe at home and keep your dogs on a leash when visiting natural areas

Credit: Victoria Government

Volunteer Groups

Friends Groups

Friends of Balcombe Park
Convenor: Ian O'Loughlin
Mobile: 0412 432 618 **Email:** ianolou2@gmail.com
Upcoming working bees:
Dates: Jun 25, Jul 30, Aug 27, Sep 24 **Time:** 10am-12pm

Friends of Bay Road Heathland Sanctuary
Convenor: Sue Forster
Phone: 0431 688 606 **Email:** sue.forster@optusnet.com.au
Upcoming working bees:
Dates: Jul 14, Aug 12, Sep 9 **Time:** 10am-12pm

Friends of Bayside Roads
Contact: Derek Jones
Phone: 0417 360 747 **Email:** derekhjones36@gmail.com

Friends of Beaumaris Reserve
Convenor: Chris Sutton
Phone: 0438 327 924 **Email:** sutc@bigpond.com

Black Rock and Sandringham Conservation Association Inc.
Upcoming working bees:
Dates: Jul 3, 17, Aug 1, 15, Sep 5, 19 **Time:** 10am-12pm

Friends of Brighton Dunes
Convenor: George Leighfield
Phone: 0432 465 707 **Email:** gleighfi@gmail.com
Upcoming working bees:
Dates: Jul 3, 17, Aug 1, 15, Sep 5, 19 **Time:** 8am-9.30am

Friends of Cheltenham Park
Convenor: Valerie Tyers
Phone: (03) 9588 0107 **Email:** valerietyers@hotmail.com
Upcoming working bees:
Dates: Jul 1, Aug 6, Sep 3 **Time:** 10am-12pm

Friends of Donald MacDonald Reserve
Convenor: Kim Croker
Phone: (03) 9589 2443 **Email:** kcroker@bigpond.net.au
Upcoming working bees:
Dates: Jul 4, Aug 2, Sep 6 **Time:** 9am-11am

Friends of Elster Creek
President: Thijs Honningh
Secretary: Anubhooti Jaiswal
Website: www.facebook.com/friendsofelstercreek
Meeting point: Elwood Canal, Glen Huntly Road Bridge

Friends of George Street Reserve
Convenors: Pauline Reynolds & Val Tarrant
Phone: (03) 9598 6368 **Email:** pauline.reynolds.au@gmail.com
Upcoming working bees:
Dates: Jul 15, Aug 20, Sep 17 **Time:** 10am-12pm

Friends of Gramatan Avenue Heathland
Convenor: Jo Hurse
Phone: (03) 9283 2052
Upcoming working bees:
Dates: Jul 1, Aug 6, Sep 3 **Time:** 1pm-3pm

Friends of Long Hollow Heathland
Convenor: Rob Saunders
Phone: (03) 9515 3383 **Email:** robsaunders357@gmail.com
Upcoming working bees:
Dates: Jun 25, Jul 30, Aug 27, Sep 24 **Time:** 1pm-3pm

Friends of Merindah Park & Urban Forest
Convenor: John de Cruz Douglas
Phone: 0417 386 408 **Email:** jdecdouglas@internode.on.net

Friends of Mother Stock Areas
Convenors: Pauline Reynolds and Rob Saunders
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Phone: (03) 9515 3383 **Email:** srednuas@hotmail.com

Friends of Native Wildlife
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Phone: 0412 545 441 **Email:** info@bayfonw.org.au
Website: www.bayfonw.org.au

Friend of Picnic Point Sandringham
Convenor: Terry Reynolds
Phone: (03) 9598 2978 **Email:** reynolds_family@hotmail.com

Friends of Ricketts Point
Convenor: Diana Pearce
Phone: 0448 573 256 **Email:** dipearce39@icloud.com
Upcoming working bees:
Dates: Jul 11, Aug 9, Sep 13 **Time:** 9.30am-11.30am

Friends of Ricketts Point Landside
Convenor: Sue Raverty
Phone: (03) 9589 2103 **Email:** sraverty@westnet.com.au
Upcoming working bees:
Dates: Jul 17, Aug 15, Sep 19 **Time:** 1pm-3pm

Friends of Table Rock
Convenor: Ken Rendell
Phone: (03) 9589 4452
Upcoming working bees:
Dates: Jun 27, Jul 24, Aug 29, Sep 26 **Time:** 10am-12pm

Do you want to know more about Bayside and the Banksia Bulletin?

Please refer to our website

www.bayside.vic.gov.au

Bayside City Council

Environment Groups

Bayside Earth Sciences Society Inc.
President: Murray Orr
Email: baysidefossils@gmail.com
Website: www.beaumarisfossils.org

Beaumaris Conservation Society Inc.
President: Caroline Lawton
Contact: PO Box 7016, Beaumaris 3193
Email: pre@bcs.asn.au
Website: www.bcs.asn.au

Black Rock and Sandringham Conservation Association Inc
President: Craig Brunnen
Phone: 0488 303 887 **Email:** brunnenc@gmail.com
Secretary: John Neve
Phone: 0479 196 260 **Email:** jneve@ozemail.com.au

Marine Care Ricketts Point Inc
President: Elizabeth Jensen
Phone: 0419 354 998 **Email:** elizabethjjensen@outlook.com
Website: www.marinecare.org.au

Sandringham Foreshore Association
President: Dr Vicki Karalis
Email: sandyforeshore@optusnet.com.au
Website: sandringhamforeshore.tumblr.com

Yalukit Willam Nature Association
President: Natalie Davey
Email: elsternwickparkassociation@gmail.com

Editorial Policy
The purpose of publishing the Banksia Bulletin is to circulate information, report on events, and to profile relevant environmental issues important to our community.
The Bulletin is also published to support the network of people involved in enjoying and protecting our local environment.

Bayside City Council encourages people from our local community groups to submit articles of interest, share experiences and news about any upcoming events. All articles are reviewed prior to publication and Council reserves the right to omit or edit submissions.

Acknowledgements
Thank you to all the people who have contributed to this issue of Banksia Bulletin.

Disclaimer
The views expressed in the Banksia Bulletin are not necessarily those of Bayside City Council nor its representatives.

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Please send articles and photos to
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Bayside CITY COUNCIL

Tawny Frogmouth (*Podargus strigoides*)
By Pauline Reynolds