

banksia

bulletin

spring 2024



**Wangara
Road
wildlife**

**Connecting
through
bushwalking**



Bayside
CITY COUNCIL

Bayside Community Nursery

GALA DAY

Saturday 12 October
9am-1pm

The last day of public sales for this season
is Thursday 31 October 2024.

Opening days: Thursdays and Saturdays
Opening hours: 10am-12pm
Located: 315-317 Reserve Road, Cheltenham

For more visit our website or call 9583 8408.

Grass Trigger-plant
(*Stylidium graminifolium*)
by Pauline Reynolds

Acknowledgement of Traditional Owners

Bayside City Council proudly acknowledges the Bunurong People of the Kulin Nation as the Traditional Owners and Custodians of this land, and we pay our respects to their Elders, past, present and emerging. Council acknowledges the Bunurong's continuing relationship to the land and waterways and respects that their connection and spiritual identify is maintained through ancient ceremonies, songlines, dance, art and living culture. Council pays tribute to the invaluable contributions of the Bunurong and other Aboriginal and Torres Strait Islander elders who have guided and continue to guide the work we do.



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Cover photo: Blue stars (*Chamaecilla corymbosa*)
by Pauline Reynolds



Dolichos Pea (*Dipogon lignosus*)



Weeds of Bayside

By Aaron Hurrell, Citywide Bushland Crew

Dolichos Pea (*Dipogon lignosus*)

The Dolichos Pea is a flowering vine that's native to the western and eastern Cape of South Africa. It is classed as an invasive weed in Australia and New Zealand, and used in horticulture in Europe, Sri Lanka and California.

A member of the legume family, Dolichos Pea is also known as the Mile-a-minute vine, Cape Sweet-pea and the Okie bean.

In its native habitat, Dolichos Pea is found climbing over trees and shrubs in forest margins and stream banks. In Australia, it follows these same habits but can be found close to urban areas.

Using any nearby structures to support itself, this woody vine likes to climb and smother any nearby trees and shrubs to about 2m high, and spreads horizontally for great distances.

The leaves are formed into three leaflets that are diamond shaped and tend to be a darker green on the upper surface while paler on the under-surface.

The flowers are typical pea flower shaped, ranging in colours from pink to purple, that grow at the end of new growth.

The flowering period is from August to January in its native range. Seeds are in a flat pod that tend to explode violently, spreading and covering vast distances. These seeds can remain dormant in the soil until conditions become optimal.

Germination is increased by disturbance like seasonal changes, fire and rain, and shady areas with supports to grow on are preferred.

The best way to deal with Dolichos Pea in an infested area is to start on the outer margins with the younger and smaller plants then target the larger plants.

Ideally the most effective way for dealing with the Dolichos Pea individually is to cut the stem at the base then apply herbicide to the cut on the roots. Smaller plants and possibly larger infestations under certain conditions can be sprayed with herbicide.

Source: Wikipedia *Dipogon lignosus*



Badge huntsman (*Neosparassus diana*) by Belinda Raymond

Insect Survey Night

- Where** Bay Road Heathland Sanctuary
- When** Friday 20 September
- Time** 6.30-10.30pm
- Meeting place** Bay Road front gate
- Where** George Street Heathland Reserve
- When** Fridays: 4 October, 8 November & 6 December
- Time** 6.30-10.30pm
- Meeting place** Tulip Street entrance
- Bring** weather appropriate clothing and a torch

Wangara Road

Wildlife



Common Bronzewing by Michiko Iida

The former golf driving range at Wangara Road has had an interesting modern history.

Words and photos by Friends of Native Wildlife Inc.

Formerly a quarry, then a landfill, it eventually became a golf driving range for many years.

Since 2019, it has been sitting vacant while any potential restrictions on future use due to it being an ex-landfill site are investigated.

This history has made it a haven for local wildlife. As a golf driving range, human activity was concentrated in the north. The southern end was mostly non-accessible to the public. Since the closure of the driving range, the isolation of the site has increased, especially at the southern end.

Friends of Native Wildlife Inc. believe this isolation combined with the range of healthy native vegetation is why this site is so popular with many species. For many years, Bayside City Council has supported our Friends Group with planting to improve the habitat at Wangara Road for the locally iconic, but shy, Common Bronzewing.

Council also supported us to undertake some informal wildlife monitoring earlier this year. We were impressed with the range of species recorded in the southern half of the area during our small survey. The northern half also has plenty of wildlife, but the most obvious species commonly seen there was the problematic Noisy Miner. Although a native bird, humans have altered the landscape in a way that gives this species a huge and unfair advantage over other birds. Noisy Miners do inhabit the southern portion of the site, but their numbers are much lower as that part of the site is less suitable for them.

A target species for us is the Common Bronzewing. At Wangara Road, groups of up to 11 Common Bronzewing

have been seen sitting on the ground. We saw at least three almost every time we entered the site. They often rest and forage under shrubs, where they are difficult to see. They do not like people being close, and we typically notice them become agitated when we are still 20 metres away. At 10 metres, they often fly away. Our suspicion is they like this area partly because the plants provide food they like, and partly because of its isolation from disturbance.

During our monitoring of larger birds, we frequently saw Eastern Rosella, Pied Currawong and Australian Magpie. Smaller birds were absent or rarely seen. We believe this indicates a need for more shrubs and longer grasses to provide both food and cover from danger, especially from the Noisy Miners.

We deployed microbat detectors and found numbers much higher than anywhere else in Bayside. At the time, much of the grass had been allowed to grow a little longer than usual. We suspect that may have been a factor, with less-frequently cut grass providing a breeding haven for insects that feed these small flying mammals.

Tiny wildlife was also in abundance, frequently needing to be ejected from our monitoring equipment when we retrieved it. Many were not able to be identified properly, but those that could be included the Two-tailed Spider, Square-ended Crab Spider, Common Grass Blue (butterfly), Neat Epidesmia (moth), Plague Soldier Beetle and a Bobilla (ground cricket).

Friends of Native Wildlife Inc. plans to conduct more surveys of the wildlife in this area and hopes to report that the

diversity is improving, and the current species are thriving, over coming years.

Council has recently adopted a Masterplan for this area, and we look forward to working together to ensure the natural beauty of this important open space can be enhanced and enjoyed by locals, while preserving the value of this area for wildlife.





VALE

Dr Valerie Margaret Tarrant OAM

Val Tarrant's death is a great loss to the community of Bayside in so many ways.

Words by
Pauline Reynolds
Convenor George Street Reserve
and
Stephen Morey
Member of the Black Rock and Sandringham Conservation Association

The citation for her Order of Australia Award in 2015 mentions no less than 11 conservation and environmental organisations where she was a foundation member, joint coordinator, member, friend, committee member or active contributor. Many of these roles she held for more than 50 years, with some alongside her husband Keith.

Val also contributed to the preservation of Bayside's community history as a member or chair of four historical and heritage organisations and the National Gallery Society of Victoria.

She was a staunch member of the congregation of the Beaumaris-Black Rock Uniting Church together with her son, Jon.

During those years until her retirement in the late 1990s, Val taught full time and looked after her family, which included five children.

She also found time to co-write *Bayside Reflections* with Graeme Disney, which was published in 1988. This book is a history in words and pictures of the former City of Sandringham.

Val had a busy life.

She was an enthusiastic and well-loved teacher of many hundreds of secondary students at Mentone Girls Grammar School. She also taught at Fintona Girls School in Balwyn where she was educated prior to attending the University of Melbourne where she achieved an Arts Degree with honours, and later, a Master of Education. There have been many beautiful tributes on social media from former students and others whose lives Val touched in some way.

When Val retired from teaching, she studied for a doctorate. Her thesis, titled *Melbourne's Indigenous Plant Movement: the return of the natives*, was completed in 2005.

The thesis is a most important legacy, among all others that Val has left us. In great part it chronicles the history of the conservation movement in Sandringham and now Bayside's municipal areas and beyond.

The era that Val wrote about was a real turning point in the way the public, and many politicians, began to

see and understand the importance of preserving our remnant bushland areas and foreshore. Val played a large and invaluable part in that movement.

In the thesis' acknowledgements, she credits her parents for instilling in her a "love of the bush and its wildflowers".

Val loved the natural environment of wherever she travelled in Australia and the world. She had a special fondness for Black Rock and its neighbouring environs, particularly George Street Reserve.

After the fire which burnt the woody weeds and understorey at George Street in 1984, Val and I (Pauline Reynolds) resolved, with some expert advice, to conserve the wonderful heathland which miraculously regenerated. We were co-convenors of the Friends Group from 1990, when these volunteer-led groups were first established in Sandringham municipality.

In her beautiful writing, Val's love of the natural environment and belief in the world reveals itself clearly and is a joy to read. She was always quite determined to contribute a piece about George Street



The George Street Reserve sign, written by Dr Val Tarrant OAM.



Dr Val Tarrant OAM (second from left) and volunteers during a working bee at George Street Reserve in 1996.



(L to R) Bushland & Nursery Ops Supervisor Citywide Jo Hurse, George Street Reserve Co-convenor Pauline Reynolds, Dr Val Tarrant OAM and Bayside Biodiversity & Conservation Planning Officer Amy Weir turning the pages of a special book created for Val in appreciation of her work in Bayside.

Presentation to Val

By Pauline Reynolds

On the morning of Friday 12 July, a very happy time was spent with Val Tarrant at Fernhill where Val was having respite care, joined by Bayside Mayor Cr Fiona Stitfold, Bayside's Biodiversity & Conservation Planning Officer Amy Weir and Citywide Bushland & Nursery Operations Supervisor Jo Hurse.

Cr Stitfold presented Val with a letter of appreciation for her many years of contribution to the Bayside Community Nursery among all the other things Val has

supported and worked so hard for. She was also given an album of photographs, a record of just some of the work she has contributed to the community, and a beautiful bunch of flowers.

Everyone enjoyed chatting and reminiscing, looking at all the very familiar people and places pictured in the album, and hearing Val sing not only the song of Mentone Girls Grammar, where she taught so long, but also that of Fintona, where she went to school.

It was lovely!

My tribute to Val

By Stephen Morey

Val Tarrant's contribution to the preservation of our natural heritage goes back to at least the formation of Black Rock and Sandringham Conservation Association (BRASCA) in 1968 and the Port Phillip Conservation Council (PPCC) in 1970.

Back in the 1960s and 1970s there was no shortage of proposals to clear the last remaining pieces of our bushland and foreshore, to tidy up our suburbs and put concrete and bitumen where sand and nature sufficed. But it was a proposal to clear a large piece of foreshore to make a car park above Half Moon Bay so people could watch a yacht race that got BRASCA going. For many years, the centre of conservationist activity was at 47 Bayview Crescent; that's where meetings were held, important decisions were made, and so many fundraising and social events happened. Val and Keith Tarrant were the inspiration for generations of us who didn't want to lose our natural heritage. Keith was not only BRASCA President but also the Director of the PPCC and in all those battles to save what mattered, Val and Keith were always there, working up front or behind the scenes.

Val was a member of BRASCA's committee for much of the 55 years of our history. She retired from the committee in November 2023 at the age of 93 and in April this year, we were pleased to present her with a beautiful photo of Red Bluff to complement the paintings of the special place she had at Bayview Crescent.

Many people have contributed to saving what remains of our beautiful environment, but it's no exaggeration to say that if there was ever a piece of bushland or a tree or a streetscape under threat, if it was saved and is still there today, Val was there to help preserve it.



Nursery volunteers Rob Saunders and Ken Rendell together with Lesley Falloon OAM, Dr Val Tarrant OAM, Daintry Fletcher and Pauline Reynolds at the 40th Anniversary of the Bayside Community Nursery (2018).

Connecting through

bushwalking

Croajingolong National Park, Australia.
Source: Shutterstock

Stony Creek Fish Farm.
Source: www.stonycreekfishfarm.au

View of mountain range out
across to Mt Feathertop, Victoria.
Source: Shutterstock

By Matthew Grover, Citywide Bushland Crew

Part 1: Lost

It had just gone 2pm as we arrived at the Stony Creek Fish Farm just north of Harrierville and, after erratically freeing ourselves from the cramped chaos of the minibus, we stood and gazed in awe at the cresting landscape before us.

Our immediate view was dominated by the burgeoning blue-green foothills of Mount Feathertop; as for what lay beyond, we could only imagine. Picturesque alpine meadows laced with vibrant heathland and twisting snow gums, fierce and thrilling ridgelines carved of ancient granite, entailing timbered valleys overflowing with towering mountain ash, high summits of merciless exposure and breathtaking 360-degree views; for my 15-year-old self the unknown of the next five days was infinitely uncontainable.

Our destination for that night was the Melbourne University Mountaineering Club hut, described to us as bearing comic resemblance to both a giant tortoise and an alien spacecraft – surprisingly such fanciful renderings are not so far from the truth, it is a remarkable structure. Excited by the prospect of a wilderness moon base we were eager to get going and after a quick

group photo we were underway; myself and two mates as well as two other boys from the year above led off, our teacher and two other outdoor education staff following some 20 minutes behind – leaving enough space as to grant us ample physical freedom and navigational independence, but close enough that they would catch up periodically and could render aid if required. In any case, the afternoon's proceedings were exceedingly simple: follow the trail upstream for a kilometre, make the obvious river crossing at the base of the hills, and then begin the enduring climb up the Northwest Spur track. It was step two where we came undone.

Arriving at the base of the hills – and I want to stress how ridiculous and absent-minded this error was – we forgot entirely about needing to cross the river and instead began our ascent early. Drawn in by the bright orange earth of an enticingly spacious unmarked 4WD track (presumably once for management access but now seemingly disused) we were now heading completely in the wrong direction. Our pace slowed with the steepness of the terrain, but morale remained high, and we climbed steadily for the next hour and a half, my gaze fixed on the distinctive green Woolworths bag hanging

from one of the older boy's packs, stocked with two takeaway pizzas, purchased earlier in the day and to be enjoyed for a luxurious first night's dinner. Gradually the 4WD track betrayed us, narrowing and then becoming hard to follow, all the while my map and compass ignored within my pack as we internalised our doubts and continued despite the unexpected change in conditions. Only once we found ourselves tearing away at a dense understory of shrubs and bracken, battling for every metre of progression along a path which had now completely forsaken its own existence did we finally realise something was properly wrong. Too late in the afternoon to turn back however, our mounting anxiety and inability to reconcile with our geographical embarrassment drove our fatigued bodies onwards; surely camp lay just over that next rise, we pleaded. So hilariously desperate in fact, I couldn't help but trick myself into thinking I had spotted the hut just ahead on the ridge; sparkling in the piercing light of the low sun, silver trunks of mountain ash morphed into glistening MUMC aluminium. "I think I can see it," I remember saying on multiple occasions.

Darkness encroached quickly and we were at least intelligent enough to realise

that marked the end of our walking for the day. Passing into a broad saddle we took advantage of the relatively flat ground, clearing a mess of branches and leaf litter and setting up our tents, then we quickly set about relaying our position to our teacher via the emergency GPS device that had been bestowed to myself as I was the youngest in the party. Lost but otherwise okay was our chosen communication. Much too deflated to cook dinner we decided to repurpose tomorrow's lunch and as we ate our humble salami and cheese wraps, we theorised about the blinking lights off in the distance. Were they the headlamps of strangers camped only 200 metres from us? Lights from the hut, on the ridge just across the valley? A miniaturised town many kilometres away on the plains below? Or perhaps a great void had opened, and they were the eyes of some unknown horror beckoning us forth? The darkness combined with our confusion and fatigue had laid waste to any sense of scale, depth perception or logic that we may have once possessed. Unceremoniously we settled into our sleeping bags and tried to ignore the disconcerting creaks and moans of a nearby tree that had us convinced it could fall at any moment; it was going to be a long night.

Part 2: Found

I have tried to dramatise this account as best I can but unfortunately for the narrative (though fortunate for us at the time) the resolution to our predicament was starkly uneventful. Having made it through the night, the five of us milled about in our tents, shirking the morning drizzle and considering our next move. In the meantime, having received our location from the satellite device, the staff made their way to us via Bungalow Spur track, which, unbeknown to us, passed a mere 50m downslope of where we had camped. Departing before daybreak they had trekked some 15km to reach us by 9.30am. Upon reconvening, we established exactly where we had gone wrong and where we ended up (as well as had a good laugh) then a new route was quickly agreed upon and off we went, the next four days of hiking proceeding without a hitch, every bit as new, profound and rewarding as we had dreamed.

This was my first bushwalking experience of this nature – multiple days hiking and camping in remote country – and I imagine it would be easy to assume that getting lost on that first night may have scared me away from any future trips.

In reality, the discomfort of that first night faded almost instantly and while it persists in memory – and makes for a good story – it ultimately proved an insignificant pothole in a road that went on to break far more exciting and fulfilling ground in regard to outdoor adventures.

Looking back, I didn't enjoy much of my later years in high school, but I am overwhelmingly grateful for the parts that were meaningful, and I feel very lucky to have had the opportunity to spend my holidays hiking in such beautiful and powerful country. This Mt Feathertop walk, subsequent trips to Croajingolong, Koyoora, Lake Tali Karng, Mt Buller, Mt Howitt and Mt Kosciuszko, these were deeply memorable and profoundly formative experiences.

These experiences sparked within me an exuberant love of nature's honesty and grace, and became the backbone for my interests in geography, geology, and especially botany.

Undoubtedly this corralled me down a path that has led to my present position as part of Bayside's bush crew. And all of this forgets the piece of most value, the enduring bonds forged with friends on these walks, friends who remain my best mates to this day.

I want to close this article with the briefest (inadequately so) explanation of why I've come to find bushwalking such a compelling pastime; sincerely I hope that by the end of this I have managed to impart some sense of the joy it has brought me and possibly – now that spring is upon us – inspire others to embark on fresh ventures among Victoria's wildflowers.

So far, I have spoken of somewhat grandiose adventures and of hiking that is challenging and remote, simply because that is what I began with. But let me be clear, there is no wrong way to be in nature and I think there is just as much value to be found in the simple pleasure of an afternoon spent wandering in the sunshine, and this, due to its accessibility, is far more frequently at the top of my to do list.

For me, walking is an exercise in rhythm: first the steady cadence of the legs, then a refined flowing breath and the measured pumping of blood, lastly the brain easing into peaceful tidal oscillation; the body settles into a state that is primitively familiar and beautifully efficient.

This harmony of hiking is both positively joyous and profoundly grounding, I feel the pace of my life slowing to match that of the surrounding environment and to be present now comes swiftly and easily.

Life on the trail is simple, and to indulge in that simplicity is cathartically satisfying. Progress is taken just one step at a time, and as long as physiological needs are met, one should find themselves occupied by an abundance of mental space with which to absorb the beauty of life around them.

To pass through a landscape on foot is to pass through slowly; it is the most intimate form of travel, an opportunity to form a connection with people and place, to dive into the vibrancy and detail of a natural world that is ancient and alive, catalysing powerful and lasting memories along the way.



Wildflower wandering

Words and photos by Sue Forster
 Convenor Friends of Bay Road Heathland Sanctuary

The Friends of Bay Road Heathland Sanctuary held its first of five spring Wildflower Wanders on Sunday 18 August. On a lovely sunny afternoon, we had around 25 visitors, many of whom lived nearby but had never previously seen inside the locked part of the Sanctuary.

Our guides Rosie Bates and Sue Forster took visitors on 30-minute tours of the Sanctuary while John Douglas manned the welcome table and Bayside Volunteer Support Officer Anna Malone helped. George Street Reserve Convenor Pauline Reynolds popped in to say hello and then found herself guiding as more people drifted in.

Blooms in various yellows provided riotous early spring colour throughout the Sanctuary. Three types of wattle were in full flower—Sweet Wattle (*Acacia suaveolens*), Hedge Wattle (*A. paradoxa*), Juniper Wattle (*A. ulicifolia*) and, true to its common name, the Showy Bossiaea (*Bossiaea cinerea*) put on a great show.

Small-leaved Clematis (*Clematis microphylla*) draped itself gracefully over fences and shrubs, and Common Beard-heath (*Leucopogon virgatus*) punctuated the darker internal loop path with tiny white flowers.

Hundreds of Nodding Greenhoods (*Pterostylis nutans*) lined the northern fence and loop path, along with a few tiny elusive Trim Greenhoods (*P. concinna*). In the 2022 burn area, a few Chocolate Lilies (*Arthropodium strictum*) and Grass Trigger-plants (*Stylidium graminifolium*) had also come into flower.

Behind our marquee, two Eastern Spinebills flitted around within a small radius of their favourite food plant – a large green-flowering Common Correa (*Correa reflexa*). We also spotted Eastern Rosellas in a stand of Black Wattle (*A. mearnsii*) that had been shredded the previous week by a flock of Yellow-tailed Back Cockatoos.

Not surprisingly, many of our visitors stayed on to revisit the wildflowers and chat after the formal tours. It was very rewarding to have so many engaged newcomers enjoying the Sanctuary. We hope you all come again!



Common Beard-heath



Showy Bossiaea



Anna Malone and John Douglas chatting with visitors.



Sweet Wattle

Strangling the climbers and vines

from Brighton to Beaumaris

By Cris Cochrane, Citywide Coast Crew

The coastal fringe from the southern border with the City of Kingston at Charman Road Mentone to Small Street at the southern end of Hampton is fortunate to have several different and interesting Environmental Vegetation Classes (EVCs).



Bridal Creeper Rambling Dock Cape Ivy Dolichos Pea Dolichos Pea leaf Rambling Dock Madeira Vine Madeira Vine tubers

While there are many areas with high ecological value, much of this salty strip has, in places, issues with invasive weeds, particularly vines. Most notably, but not exclusively, these include Cape Ivy (*Delairea odorata*), Rambling Dock (*Rumex sagittatus*), Madeira Vine (*Anredera cordifolia*), Dolichos Pea (*Dipogon lignosus*), and Bridal Creeper (*Asparagus asparagoides*).

The Citywide Bushland Crew believes in addressing these challenges with an integrated management approach. This requires a combination of hand weeding, the use of suitable chemicals that we are trained in the use of and the removal of newly blooming flowers as well as the excavation of underground plant parts where appropriate.

Some species are easier to address than others and we have had good outcomes from locating the trunks of the Dolichos vine, cutting it at ground level and painting the cut area with an appropriate herbicide.

Plants such as Rambling Dock and Madeira Vine often have interconnected underground tubers. We approached

these by initially addressing the further spread of seeds (via the removal of flowers), but then attempted to extract from the soil all of the tubers to reduce further growth and expansion of the weed.

Cape Ivy has been a persistent issue on the foreshore for some time, but according to many long-term residents and locals the reduction of its spread is visually clear and is close to being significantly suppressed in residual areas. This wonderful achievement has been accomplished in no small part by the persistence of Bayside's extremely dedicated foreshore volunteer groups.

Lastly, the management of Bridal Creeper has been successful (as with other invasive species) by implementing integrated methods to suppress and control its expansion. We have observed outbreaks

of Bridal Creeper for signs of the biological control agent Rust fungus (*Puccinia myrsiphylli*) and collected infected samples of the plant. We then prepare the collected material to make a spray to affect other outbreaks of the pest and spread it widely, where it has no ill effect on surrounding plants.

Going forward, we have a strong belief that through a committed and a scientifically considered approach, we can greatly reduce and possibly eliminate many or all these pervasive and invasive climber and vine species from our stunning foreshore bushlands.



Citywide Bushland Coast Crew welcomes Adrian Saltis to the foreshore and primary dune team. Adrian has a Bachelor of Environmental Science (Management and Sustainability) from Deakin University and is passionate about implementing positive ecological advances in the coastal environment.

Gardens for Wildlife:

Annie's nature strip transformation

Did you know that more than one-third of all public green space is nature strips?

Planting nature strips with indigenous plant species can extend wildlife habitat from our gardens, increase biodiversity and assist with wildlife corridors to our bushland, heathland and foreshore reserves and other green spaces, and lessen overall maintenance along with a host of other benefits.

Hampton resident, Annie, is transforming her nature strip from turf grass to a haven for wildlife by planting indigenous species.

Take a look at Annie's journey so far.

Part 1

To get started, Annie followed these steps:



Checked [Bayside's Nature Strip Gardening Guidelines](#) and found no approvals were required if she followed the guidelines.



Contacted [Before You Dig Australia](#) to find the location of all the underground service. All clear for planting!



Removed the turf via two methods - first by hand and then by using plastic sheeting.



Annie removing the turf on her nature strip by hand, using a hand shovel.



Removing turf using black plastic, weighted down with bricks.

While nature strips are public land, private citizens are required by law to maintain them, except for trees which Council will manage.



Larvae from the African Black beetle

Stopped to check out the larvae of a Rhinoceros Beetle.

Part 2

Next part of the transformation included these steps:



Removed all the Kikuyu turf.



Removed excess soil.



Identified soil with a YouTube video from [Gardening Australia](#). Turned out to be sandy loam!



Stopped to check out the worms, other vital microorganisms and even a thriving African Black Beetle (benefits of NOT using herbicide).

Part 3

The third part of the transformation centred around mulching. Key take-aways included:

- Mulching is essential because it keeps moisture in the ground, deflects hot sun rays, enhances nutrients in the soil, promoting microorganism activity and suppressing weeds.
- Not all mulches are the same – too fresh and it will take nitrogen out of the soil, too fine and it will blow away and avoid dyed mulch as it can impact soil microbes.
- Sheet mulching is effective but can take six months before you can plant.
- Ideally, mulch should have a mix of large and small pieces.
- Aged mulch works best!



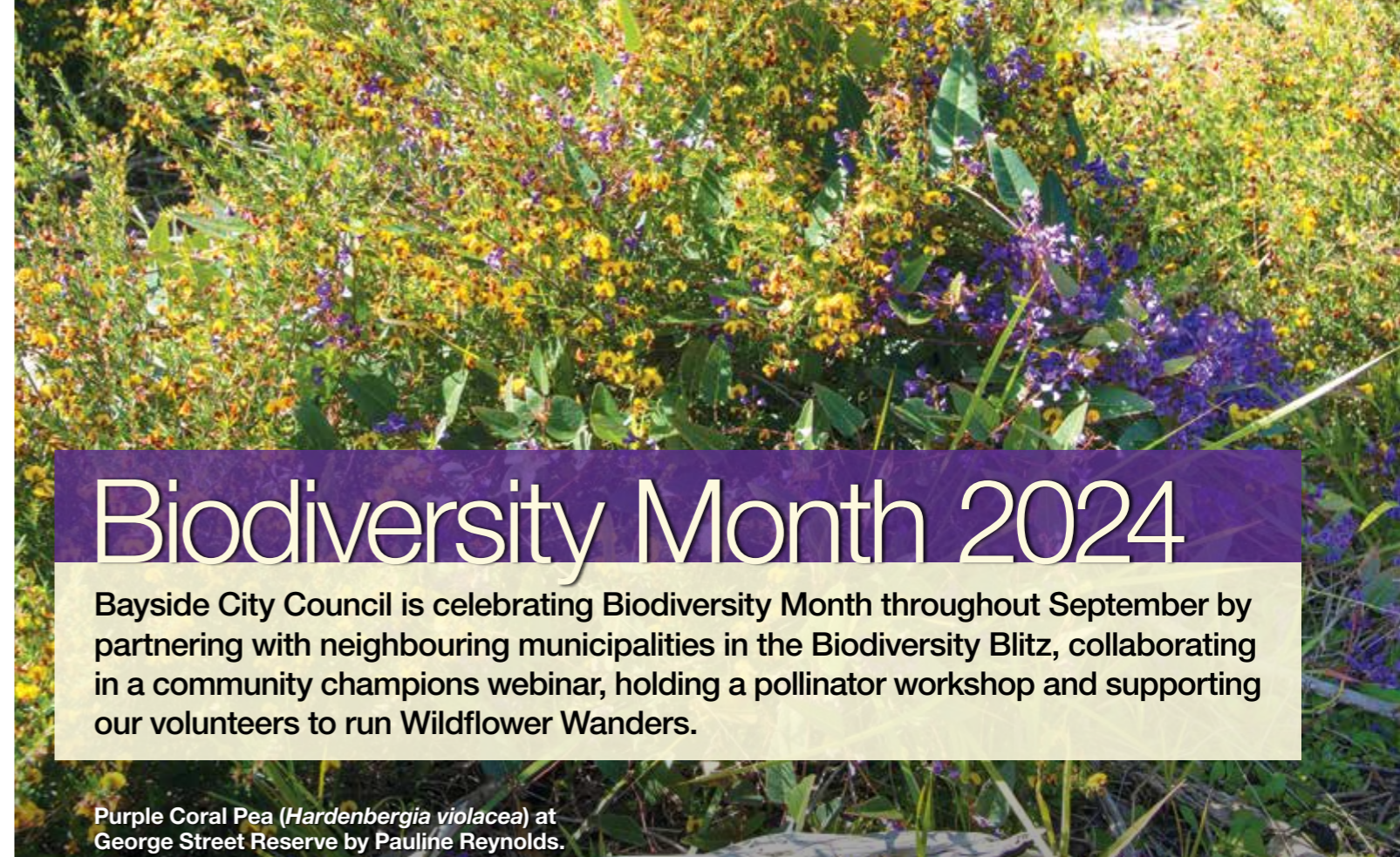
Annie's favourite mulch: Natural Euca

Annie's recommendation: mulch depth should be between 30-50 mm thick, enough to trap soil moisture while allowing better moisture penetration

Annie's hot tip? If you have a tree on your nature strip, don't pile the mulch too close to the trunk (avoid tree rot)

Final instalment coming in the Summer edition of *Banksia Bulletin*.

For more about [Gardens for Wildlife](#) visit Council's [website](#).



Biodiversity Month 2024

Bayside City Council is celebrating Biodiversity Month throughout September by partnering with neighbouring municipalities in the Biodiversity Blitz, collaborating in a community champions webinar, holding a pollinator workshop and supporting our volunteers to run Wildflower Wanders.

Purple Coral Pea (*Hardenbergia violacea*) at George Street Reserve by Pauline Reynolds.

Biodiversity Blitz 2024



Grab your smart phone or camera and join other Victorians in their quest to record the most species.

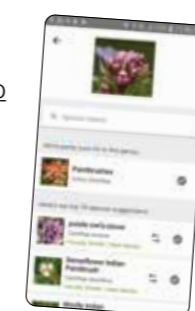
Join the Bayside City Council's Biodiversity Blitz team up until the end of September by snapping photos of flora and fauna in Bayside and uploading them to iNaturalist via the app. You'll be contributing to community science and showing the world the amazing biodiversity Bayside has to offer.

How to join

Step 1 - Download the free [iNaturalist app](#) and register.

Step 2 - Join the [Biodiversity Blitz 2024 - Bayside City Council Project](#).

Step 3 - From Sunday 1 September start recording your observations.



Wildflower Wanders

Plan your spring days around these fantastic Wildflower Wanders – a collaboration between Council and our Friends groups. Participating reserves include:

- Bay Road Heathland Sanctuary
- Gramatan Ave Heathland Sanctuary
- Cheltenham Park
- Donald MacDonald Reserve
- George Street Reserve
- Balcombe Park Reserve
- Long Hollow Heathland Sanctuary

These events are held in bushland reserves on narrow unsealed paths, so please wear appropriate footwear, and accessibility may be limited.

[Visit the website](#) for information on times and dates.

Pollinator workshop

Find out which plant selection is best to bring indigenous bees and butterflies back into our urban green spaces at this in-person workshop at the Community Nursery.

Date: Saturday 14 September

Time: 10-11.30am

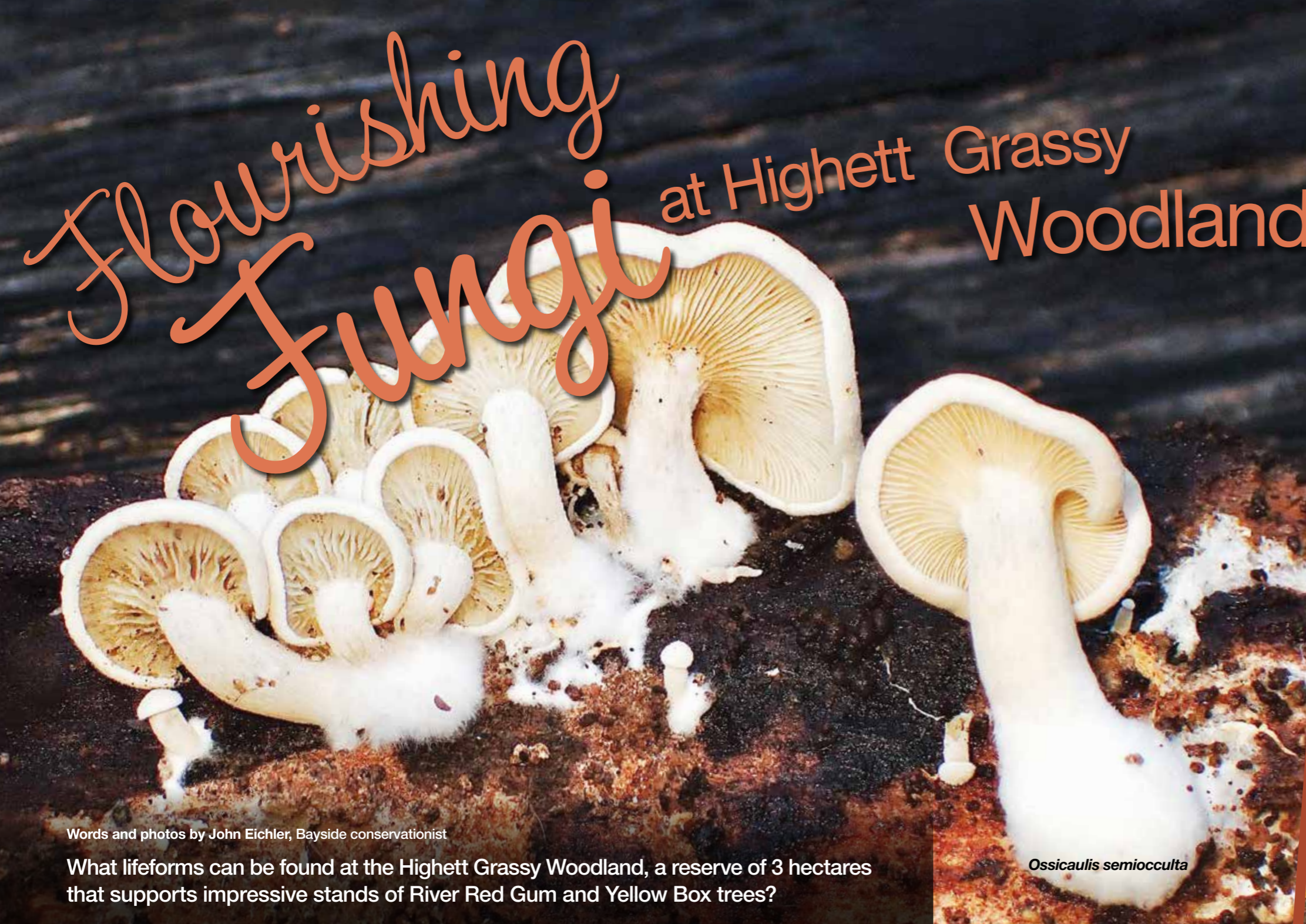
Place: Nursery House, Bayside Community Nursery, 315-317 Reserve Rd, Cheltenham VIC 3192



Please respect our plants and wildlife when taking photos. Spring is nesting season for many birds and flowering time for many orchids and herbs so try not to damage or disturb our plants or animals. If you see young birds on the ground, please leave them unless they are obviously injured. They are fledging the nest and learning to fly, and their parents will be close by. Visit [Wildlife Victoria](#) and the [Department of Energy, Environment, and Climate Action](#) for more information.

If you come across injured wildlife, please contact Wildlife Victoria on (03) 8400 7300.

Flourishing Fungi at Highett Grassy Woodland



Words and photos by John Eichler, Bayside conservationist

What lifeforms can be found at the Highett Grassy Woodland, a reserve of 3 hectares that supports impressive stands of River Red Gum and Yellow Box trees?

Council's Conservation Management Plan for this reserve documents the indigenous and introduced plants that grow there, but what of other lifeforms?

Volunteers, Citywide and Council staff who visit the reserve have made photographic records of some of the insects, spiders and other invertebrates that live in or visit the reserve. Records have also been kept of birds seen or heard in the reserve.

On 30 July 2024, Pauline Reynolds and I visited the reserve to record any fungi that might be present. The visit

took place at the end of the fungi season, following good rain in July. May to June is usually the prime time for fungi but conditions this year were unfavourable due to low rainfall during those months. We plan to return at that time next year to record what emerges.

During our visit, we observed more than 30 species of fungi, three lichens (a combination of an alga and a fungus) and two slime moulds. A selection of images of these fungi are included here. They illustrate various forms, including gilled fungi, brackets, jelly fungi and puffballs.

A variety of invertebrates are associated with fungi, including springtails, fungus flies and fungus beetles. We were pleased to find two specimens of the attractive fungus beetle, *Thallis dentipes*.

The most productive fungal habitat was a large collection of logs that have been placed near the centre of the reserve. At the time of our visit, fungi growing on these logs and bark debris were flourishing, producing an impressive display. The number and abundance of fungi here is likely to diminish gradually as nutrients are exhausted and the logs break down.

Ossicaulis semioculta



Stereum illudens



Pisolithus arhizus (right image shows internal structure)



Dacrymyces stillatus



Phlebiopsis crassa

Relatively few species of fungi were found growing on soil but in a good year more species are likely to be seen in this habitat earlier in the season.

Images of all fungi and slime moulds we observed can be viewed on the citizen science website, [iNaturalist](https://www.inaturalist.org/observations). The following link can be used to access observations of various lifeforms recorded to date and when new observations are added. Visit <https://www.inaturalist.org/observations>

If you would like to volunteer to help study or care for this reserve, please get in touch through Council or by emailing highettgrassywoodland@gmail.com

Orchid appreciation

Words and painting photographs
by Pauline Reynolds

Margaret Goode has lived in Beaumaris for many years and has been interested in wildflowers and the bush most of her life.

She had no previous experience in drawing or painting but became involved in Botanical Art about 15 years ago through the Friends of the Royal Botanic Gardens Melbourne.



Margaret's initial tutor was Mali Moir, who began her career as botanical artist in 1993 at the National Herbarium of Victoria. Margaret has now joined a local group in Hampton.

These two beautiful paintings of Bayside's local orchids, Maroon Hood (*Pterostylis pedunculata*), and Blunt Greenhood (*Pterostylis curta*) are two examples of Margaret's work. Margaret says she, "loves the intricate work because it makes you really observe and appreciate what you actually see."

(L-R) Maroon Hood (*Pterostylis pedunculata*) and Blunt Greenhood (*Pterostylis curta*).



Springtime at Yalukit Willam Nature Reserve!



Purple Loosestrife:
dormant in winter and in full bloom by December

Late winter is always a wonderful time of the year, giving us a glimpse into what's just around the corner.

If you walk through Yalukit Willam Nature Reserve (YWNR) over the next few months, you will notice the Hakea Wattles (*Acacia hakeoides*) with their amazing, sweet aroma and the striking vibrant reds of the Grevilleas, which can only mean one thing – spring is coming!

Council officers have been busy in YWNR over winter. In the coming months here's what you can expect to see.

Chain of Ponds

Wetlands in Victoria's temperate climate undertake a large change in hydrology throughout various seasons.

The typical seasonal cycles are two extreme ends of the spectrum, super dry in summer/autumn and then they slowly fill to capacity through late winter/spring.

Our aquatic flora and fauna are highly adapted, and somewhat reliant on these ecological drivers.

Council understands the importance of these drivers for wetland restoration. We take the initiative to turn the site pumps off in summer to draw down the water to small puddles and let nature respond accordingly.



Now spring is here, the water is back to its natural level, and we are starting to see new aquatic germination. As the days get longer, we expect the ponds and billabongs to burst back to life.

Dragonflies will be out and about soon, increasing plant growth. More frogs will be calling, and a healthy water bug population will attract birds like Welcome Swallow to fly over from Tasmania through summer.

Wildflower meadow

After months of careful planning, Council has completed the sowing of the wildflower meadow.

Seed cleaning was completed with the help of Yalukit Willam Nature Association (YWNA) volunteers, and germination testing with the arranging of species mixes was led by Melbourne University.

More than 60 plant species were sown, including 21 grass species and 40 wildflower forbs.

Made up of a wide variety of plant types that includes true everlastings, peas, daisies, lilies, these species are a

true representation of the endangered grassland plant communities typically seen through regional Victoria.

Soon, visitors to YWNR will be able to explore their beauty and understand the importance these species have on our local biodiversity.

September should be a time of growth as the seedlings look to get their feet firmly in the ground ready for the warmer months when we should see flowers bloom and Blue Banded Bees pollinating.

Gathering Place

Council has completed revegetation works through the Gathering Place. This work has included the planting of more than 15,000 plants in and around the site. Council has also planted 1,000 trees and shrubs as part of our micro forest.

The Gathering Place will contribute to great habitat for native birds and insects, while also becoming a secluded cool place of refuge for visitors as they meander along the path and down to the amphitheatre that overlooks the billabong.

Thank You, Di Pearce

It is with appreciation that we farewell Di Pearce as the Convenor of the Friends of Ricketts Point.

Di has been a dedicated volunteer with the Friends of Ricketts Point since her retirement in 1998. Moira Longden originally started the group in 1996 with the aim of beautifying the area of the foreshore south of the teahouse with substantial planting and weeding.

In 2018, Di took on the role of volunteer convenor following Ross Longden and has been a regular fixture at the Point. She is identifiable by her well-loved (and much repaired) Friends of Bayside

straw hat and basket of goodies.

It has been a great pleasure for the Friends of Ricketts Point volunteers to enjoy a hot cup of tea and biscuit supplied by Di at the picnic bench overlooking the point after a working bee.

Di has managed the volunteer group, promoted the work of the Friends through articles for *Banksia Bulletin* and maintained an ever-growing album of photos that show the positive impact the group has had at Ricketts Point. Di has also been an active and

valued participant in discussions of Council plans that affect open spaces, such as the Biodiversity Action Plan and Coastal Marine Management Plan.

We are grateful to Di for her many years of volunteering at Ricketts Point, taking on the leadership of the Friends group and her involvement in the betterment of the foreshore in Bayside. We wish Di all the very best and hope to continue to see her enjoying all the benefits of her hard work.

Adventures during early Bareep



Words by Natalie Davey
President Yalukit Willam Nature Association
Photos by Danny Fogg

Water (baany) is the life blood of this place and in the same way we look after our bodies, we need to pay attention to the way we treat water and the arteries that connect it to the sea.



A Magpie warbles quietly and tunefully from the top of an old Ash tree in my backyard, singing to the warming sun. Signs of early spring abound. At Yalukit Willam Nature Reserve, birds are starting to build nests, the Egret is beginning to show his breeding plumage, and the Chain of Ponds is ablaze with Purple Coral Pea (*Hardenbergia violacea*).

On a spring-like day in winter, I took a small group of Year 8 schoolgirls on a tour through the reserve and the Yalukit Willam Nature Association (YWNA) shed and plant lab. The students are learning about local waterways. Their teacher had noticed the recent signage Bayside City Council has installed around the reserve and reached out for more insight into the place and its connection to the waterways and the Bay.

The name Yalukit Willam (Yalukit-ut weelam), which means 'people of the waterways' came up as I acknowledged Boonwurrung Country. I explained to the students that it's a very appropriate name for the reserve and that they, too, are now people of the waterways, especially as they are thinking of ways to care for, and understand, their local area.

I explained how YWNA's patron is Professor N'arwee't Carolyn Briggs and how Council accepted her suggestion to rename Elsternwick Plan after her clan's name, and that N'arwee't is a term of respect that signifies someone with knowledge.

The group briefly met our resident Pygmy Perch fish, which we now have a permit to return to the Chain of Ponds (when the habitat is ready).

Our walk around the reserve was designed to bring the classroom into the

wetland and enliven the topics they have been learning about.

One of the reserve's goals under the Masterplan is to improve water quality. The southern wetland will extend the habitat and healthy ecology of the



reserve and act as a cleaning house for water flowing through.

The students loved the logs in the billabong at the Yulendji Djeembana (meeting place) and were curious as to how they looked like they had always been there.

The swales are croaking with Spotted Marsh frogs. As the group walked past these shallow bodies of water beside the Chain of Ponds near the newly planted wildflower meadow, they looked for frogs, but we didn't hear them.

All the collected seeds from the YWNA seed production are now part of the sprouting wildflower meadow, and we could see the shoots starting to greenly emerge out of the clay-cracked soils.

For plant enthusiasts, YWNA is very excited to have its own seed cleaning guide which you can find on our [website](#) thanks to YWNA member and volunteer Julie Beatty.

At one point the teacher was looking across the Chain of Ponds and said how amazing it is to have such a unique natural environment here. She said, "you just wouldn't know you are in the city".

It is natural, it is designed, it is engineered, and it's attracted a Black Shouldered Kite, who embraces the space as if it has always been here; even though the last time an apex predator felt at home and hunted here was a long time ago.

English to Boonwurrung language

Open grassy country
buathh birrang-ga

Swamp *baany tageek biik*

Local Boonwurrung clan
Yalukit-ut weelam

Grass *buath*

Water *baany*

Billabong *bungguny-eek*

Bayside *Nairm Marr (SCS)*

River, creek *wurneet*

She-oak *turrum*

Port Phillip Bay *Nairm*

Spring *Bareep*

From *The Journey Cycles of the Boonwurrung* by N'arwee't Carolyn Briggs



Beware a SWOOPING Magpie



Magpie breeding season is underway, which means some parent magpies may swoop if they think their fledglings need protecting.

Incidents of swooping may occur from now until the end of November.

Once the fledglings are independent, there is less inclination from the parent Magpies to protect them by swooping humans (and dogs).

If you see a baby Magpie on the ground, they are likely to be under the watchful eye of a parent so do not approach them – they're probably learning to fly!

Temporary signage has been installed in local parks and open spaces alerting visitors to bird-swoop hot spot areas.



Tips to avoid being swooped

- Avoid areas known to be hot spots by walking or riding in a different direction.
- Cyclists should always wear a helmet. It is better to dismount and walk your bike past a swoop area.
- Put up warning signs for others who may not be aware that there are swooping birds in the area.
- Travel in a group. Most birds only swoop individuals.
- Usually, they only swoop people facing away from them.
- Try not to panic and run. It will only encourage a swooping bird to continue its attack.
- Wear a hat in an area where there are swooping birds.
- Holding a stick or umbrella over your head will often cause the bird to keep its distance.

Please do not harass, interfere or throw stones at birds as this only makes them more aggressive and defensive. As all native birds are protected in Victoria, Council is unable to remove or relocate Magpies. Please do not harass the birds or their nests. Serious penalties apply.

If you have encountered an aggressive bird in Bayside, please contact Council.

Visit mapshare.vic.gov.au/webmap/swoop-map/ for a map of swooping hot spots.

Bayside Under the Sea

A photographic journey

Words and photos by Simon Mustoe
© Wildiaries

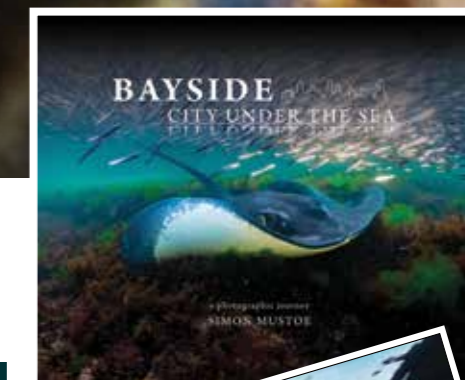
Bayside City Under the Sea is the culmination of three years of photography and over 120 snorkelling sessions by Sandringham resident, Simon Mustoe.

Simon is an author and ecologist with a long history of storytelling. His blog attracts tens of thousands of readers, and his first book *Wildlife in the Balance* was described by Ian Redmond OBE as 'perhaps the most important book of our time.' He also wrote the popular *Beginners Guide to Snorkeling Around Melbourne*.

In this new book, he connects us with the stunning, weird and almost mythical creatures that call our coastline home. In doing so, he sheds new light on their connection to our everyday lives through the many interesting ways they make our local ecosystems tick. Did you know that sea urchins are practically immortal, that seahorses live hidden below our piers and the varied fish life, protects our homes from coastal erosion.

Simon leads trips to some of the world's most pristine and beautiful coral reefs. Yet he always looks forward to coming home to explore the Bayside neighbourhood. He's been known to drop into the frigid waters hours after returning from the tropics.

Did you know that sea urchins are practically immortal, that seahorses live hidden below our piers and the varied fish life, protects our homes from coastal erosion.



Bayside City Under the Sea is a primer for anyone interested in the protection of our valuable coastline, its wildlife and nature. It's the perfect companion for anyone thinking of dipping their toe in the water and discovering it for themselves this summer.

The book is available from bookstores on 20 September 2024 and can be pre-ordered at <https://simonmustoe.blog/bayside>

Learn about Ricketts Point Marine Sanctuary

The Amphibians, Reptiles & Mammals of Ricketts Point Marine Sanctuary is now available. This is the last of the six-volume series of Urban Sanctuary books on the biota of the Sanctuary and adjacent coastal strip.

Get your copy from the Beaumaris Bookshop, South Concourse or download from ubs.org/publications/contributions-and-publications/



ABOUT SIMON MUSTOE

Simon has worked internationally as an ecologist, expeditioner and conservationist. During a passionate 30 years as researcher, communicator and consultant he has witnessed, first-hand, many oblique and candid interactions we have with nature. Simon has led WWF researchers into the heart of oil spills, trekked in the remote jungles of Madagascar, produced Australia's epic National Landscapes film series, and worked for the likes of the RSPB and BirdLife International. Simon continues to play an active role as adviser to important ecosystem restoration initiatives and regularly takes people on trips to coral reefs in Indonesia.

Book signing

Where: Mantecado Café, 593 Balcombe Road, Black Rock

When: Saturday 21 September, 1.30-3pm.

For further information email simon@wildiaries.com or call 0405 220 830.



Stepping stones for Wildlife!

how linking up isolated habitats can help nature thrive in our cities

Words by Thami Croeser

Research Officer, Centre for Urban Research, RMIT University
 Courtesy of [The Conversation](#)

Holly Kirk

Research Fellow, Interdisciplinary Conservation Science Research Group (ICON Science), RMIT University

Imagine you're a fairywren living in a patch of scrub behind a schoolyard in the suburbs. It's been pretty nice so far, but a recent increase in neighbourhood cats and the council's insect control tactics mean it's time to look for somewhere safer to live.

There's a problem, though. You're a small, bright blue bird that tends to make short flights from shrub to shrub, staying safe in the foliage. Beyond your little patch of habitat, there don't seem to be any places you can easily access. On one side are wide-open sportsfields; on the other, a busy six-lane road. Where do you go?

It's a bad situation for a fairywren, and for many other native species in cities. In ecology, we call this habitat fragmentation.

The map of suitable habitat for city-dwelling wildlife often looks like a scattering of islands in an inhospitable sea of other land uses. These species face threats or barriers such as roads, buildings, fences and feral predators. This poses several issues, such as barring access to feeding areas, increasing competition for nesting spaces within habitat patches and even reducing gene flow by making it hard to find mates.

Our newly published research shows how native species in our cities can benefit if we focus on creating strategically located green spaces to connect isolated patches of habitat.

Why we should care for urban species

Despite the myriad of challenges facing plants, animals and insects in urban areas, cities are important places to take care of our native species. Urban areas still offer valuable nesting and feeding resources, especially for tree-dwelling mammals, canopy-feeding birds and water-adapted species.

In addition to their value for conservation, urban habitats are precious spaces for people to encounter nature in the places we live and work. Urban nature has been shown to be important in balancing out the stresses of city life, particularly in disadvantaged communities. It's also good for our physical health and social connectedness – it even improves cognitive development in children.



Maps showing the areas targeted for creating green spaces to link fragmented patches of habitat. Images by T. Croeser et al 2024, CC BY



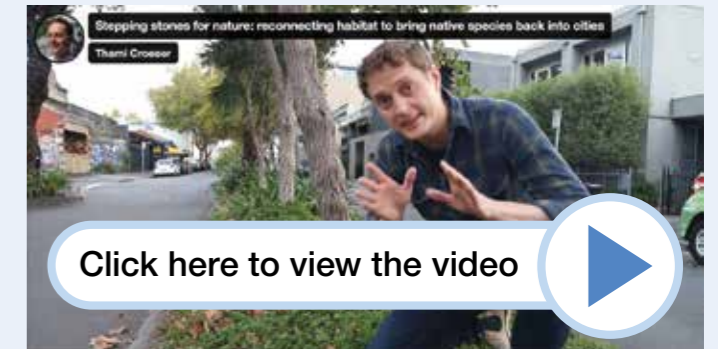
Mole crickets aren't made for travelling long distances between areas of suitable habitat. Photo by Donald Hobern/Flickr, CC BY



Native species are at risk whenever they venture beyond the safety of urban habitat patches. Photo by MomentsForZen/Flickr, CC BY-NC-ND



Blue-banded bees greatly benefited from creating green spaces to connect isolated patches of habitat. Photo by AjayTvm/Shutterstock



Click here to view the video

Thami Croeser explains the research findings on how best to create links between fragmented wildlife habitat.

Unsurprisingly, studies have shown people want more nature in their cities.

But actively supporting native species hasn't generally been the norm in many cities. The practice of planning and design to deliberately bring nature back into urban areas is still developing. Our open-access research paper in Landscape and Urban Planning offers insights into how we can tackle one aspect of the problem: habitat fragmentation.

What did the study look at?

We examined how greening projects could best connect up habitat for New Holland honeyeaters (*Phylidonyris novaehollandiae*), blue-banded bees (*Amegilla spp*) and mole crickets (*Gryllotalpa spp*) in Melbourne, Victoria. These are all species that occur locally but experience some degree of habitat fragmentation.

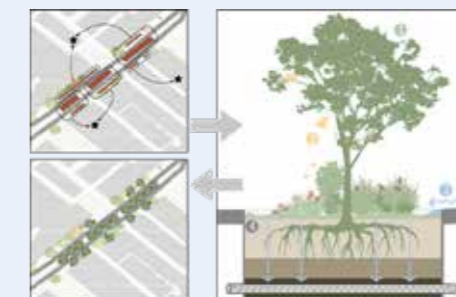
We have a lot of greening to do for climate adaptation and to create open space for new residents in our growing cities. What if we could also do this greening in a way that boosts habitat for non-human residents too?

We compared a scenario where a large number of small green spaces (formerly parking spaces) were created mainly for climate adaptation purposes, to a pair of scenarios where a smaller number of green spaces were created exclusively in areas that had been identified as key links between habitat fragments.

What were the findings?

In total, the benefit of each space in the targeted scenario was more than double that of the scenario where we placed green spaces for climate adaptation purposes, even with the same design of individual green spaces.

Here's an image of the kind of green spaces we modelled in this study.



A biodiverse green space with a street tree (1), habitat resources such as understory plants (2) and stormwater infiltration using a sunken 'raingarden' design (3) effectively de-paves the area of the parking space (4). Image by T. Croeser et al 2022, CC BY

We found significant benefits for two of our three species when green spaces were located in a way that specifically targeted habitat connections.

Blue-banded bees and mole crickets did especially well. It is trickier for these small creatures to navigate the space between habitat patches. When these small green spaces provided 'stepping stones' between bigger patches, they

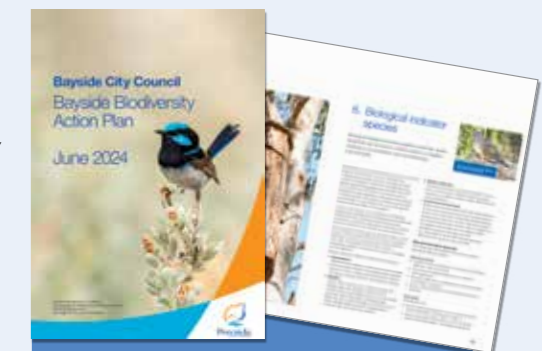
greatly increased the area of habitat a bee or cricket could reach.

Linking up habitats when we create new green spaces is one way to give native species a chance in our cities. It also gives us (and our kids) a better chance of having everyday nature experiences.

Of course, adding this 'ecosystem connectivity' lens to our green space planning isn't a biodiversity panacea. We'll still need to deliver a lot of new greenery.

And we'll have to design it carefully to support native animals while also providing cooling, reduced flood risk and recreational spaces. We also need to make sure we're picking the right species to model our maps on, and then design our spaces for.

Still, if we get this right, that fairywren might just one day have small, green 'stepping stones' to find their way around the city to a happy new home.



Council's Biodiversity Action Plan is now available on the website. Take a look at our indicator species and keep an eye out for them.

Our 'frog saunas'

could help save endangered species from the devastating chytrid fungus

Words and photographs by Anthony Waddle
Schmidt Science Fellow in Conservation Biology, Macquarie University
Courtesy of [The Conversation](#)

All over the world, frogs are being wiped out by the chytrid fungus. At least 500 species have declined, including as many as 90 species now presumed extinct.

This **catastrophic and ongoing biodiversity loss** surpasses the devastation wrought by other notorious invasive species such as cats, rats and even cane toads. Short of removing species from the wild and treating them in captivity, few strategies exist to deal with the chytrid threat.

Our **new research**, published today in the journal *Nature*, offers a promising option.

Outbreaks of chytrid (pronounced "KY-trid") are more common in cold winter months – just like seasonal human flu. We found a way to combat these winter outbreaks using heat. Our purpose-built 'frog saunas' allow affected amphibians to warm up and bake off their infections. They are so simple you can build a frog sauna using supplies from the hardware store.

Why should we care about frogs?

If frogs' good looks are not enough for you to care about their welfare, perhaps learning how they contribute to the environment or human health will pique your interest.

Frogs **eat insects** that carry and spread human diseases. Their skin is also a

rich source of new medicines that could help us **combat antibiotic-resistant 'superbugs'** or curb the startling increase in opioid addiction.

The frogs themselves are food for many **predators, including humans**.

Often starting life as a tadpole eating algae, before morphing into a carnivorous adult, frogs carry energy from aquatic ecosystems onto land – where it can be transferred throughout the food web. So losing a single frog species can have serious flow-on effects.

The origin and spread of chytrid

It's **likely the chytrid fungus originated in Asia**, where the pathogen seems to coexist with native amphibians. But chytrid is deadly elsewhere, possibly because other frogs have no natural defences.

Chytrid harms frogs by disrupting the integrity of their skin, depleting electrolytes needed for heart function. Infected frogs can **die of cardiac arrest**.

Chytrid has spread worldwide through the trade of amphibians, becoming a seemingly permanent part of ecosystems. As eradicating chytrid from the wild is not possible, we need a way to help frogs battle infection.

Introducing frog saunas

Research has shown chytrid is **worse in winter**. My colleagues and I wondered whether, if frogs had access to warmth during winter, could they fight off infection?

The fungus can't tolerate high temperatures, so if we gave frogs a place to stay warm – even for a few hours a day – perhaps they could survive and recover.

We tested this idea, both in the laboratory and in outdoor experiments.

First we established that endangered green and golden bell frogs will select temperatures that reduce or eliminate chytrid infections, when given the opportunity.



Frog saunas have been set up to support a wild population of frogs in Sydney.



The green and golden bell frog has declined from more than 90% of its former range since the chytrid fungus arrived in Australia.

Then we conducted experiments in the lab, with 66 infected frogs. The group given the option of choosing the temperature they liked best rapidly cleared their infection. The group placed in a set, warm temperature also cleared their infection, but it took longer. The low-temperature control group remained infected.

Next, we wanted to see what would happen if frogs that cured infections with heat would still get sick. Or were they immune? The group of 23 heat-cured frogs were 22 times more likely to survive the second infection than the 23 frogs that were heat-treated but not previously infected. So frogs cured with heat acquire resistance to future infections.

Finally, we wanted to see if this could work in a natural setting. We ran outdoor experiments with 239 frogs. Half were infected with chytrid one week before the

experiment began. Then they were placed in enclosures with artificial structures that heat up in the sun, called 'frog saunas'. But the frogs could choose from shaded and unshaded areas, with or without saunas.

We found frogs flocked to the sunny saunas, heated up their little bodies, and quickly fought off infection. Think of frog saunas as little factories that pump out healthy, chytrid-resistant frogs.

The frog saunas could be used on a wider scale. We believe they would be best suited to supporting populations of Australian green and golden bell frogs, but they could be useful for other species too.

The saunas are made of inexpensive materials that can be found at your local hardware store, making them accessible to the general public and wildlife managers alike.

We are already building shelters at



Green and golden bell frog photographed in an outdoor enclosure at Macquarie University.

Sydney Olympic Park, working with Macquarie University and the Sydney Olympic Park Authority. The park is home to one of the largest remaining populations of green and golden bell frogs.

Want to get involved?

You can become a citizen scientist and help save frogs from extinction. Start by downloading the **FrogID** app to learn how frogs are faring. Record frog calls with the app for scientists to identify them. This helps provide valuable data for frog conservation.

Build a frog sauna for your backyard, to help keep them healthy through winter.

It's essentially a brick-filled greenhouse, warmed by sunlight. All you need is some common clay ten-hole masonry bricks, black paint and cable ties – and a little greenhouse to put the sauna inside.

Changing the fate of frogs

Since the **discovery** of chytrid more than 25 years ago, the pathogen has been a seemingly insurmountable challenge to endangered frog conservation. Now, we have developed a promising, inexpensive and widely applicable strategy to combat chytrid.

Amphibians are such a diverse group that no single approach will be suitable for all species. So this is no silver bullet. But a useful tool for even one threatened or endangered species is cause for optimism.


The concept could also be applied to other wildlife diseases, where differences between the physiology of the host and pathogen can be exploited.




Chytrid: the frog-killing fungus, featuring Associate Professor Lee Berger (Australian Academy of Science)

Friends Groups

Friends of Balcombe Park

Convenor: Ian O'Loughlin
Mobile: 0412 432 618 **Email:** ianolou2@gmail.com
 **Upcoming working bees:**
Dates: Sep 29, Oct 27, Nov 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: Oct 12, Nov 9, Dec 14 **Time:** 10am-12pm


Friends of Bayside Roads

Contact: Derek Jones
Phone: 0417 364 747 **Email:** derekhjones36@gmail.com

Friends of Beaumaris Reserve

Contact: Jo Hurse for further working bee information
Phone: (03) 9283 2052 **Email:** jo.hurse@citywide.com.au
 **Upcoming working bees:**
Dates: Sep 29, Oct 27, Nov 24 **Time:** 10am-12pm (TBC)


Black Rock and Sandringham Conservation Association Inc.

Contact: Jo Hurse for further working bee information
Phone: (03) 9283 2052 **Email:** jo.hurse@citywide.com.au
 **Upcoming working bees:**
Dates: Sep 17, Oct 1, 15, Nov 19, Dec 3 **Time:** 10am-12pm


Friends of Brighton Dunes

Convenor: George Leighfield
Phone: 0432 465 707 **Email:** gleighfi@gmail.com
 **Upcoming working bees:**
Dates: Sep 17, Oct 1, 15, Nov 19, Dec 3 **Time:** 8am-9.30am

Friends of Cheltenham Park

Convenor: Valerie Tyers
Phone: (03) 9588 0107 **Email:** valerietyers@hotmail.com
 **Upcoming working bees:**
Dates: Oct 6, Nov 3, Dec 1 **Time:** 10am-12pm


Friends of Donald MacDonald Reserve

Convenor: Anna Rabinov
Phone: 0434 236 177 **Email:** anna.rab22@gmail.com
 **Upcoming working bees:**
Dates: Oct 6, Nov 3, Dec 1 **Time:** 10am-12pm


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
Phone: 0417 319 768 **Email:** pauline.reynolds.au@gmail.com
 **Upcoming working bees:**
Dates: Oct 20, Nov 17, Dec 15 **Time:** 10am-12pm


Friends of Gramatan Avenue Heathland

Convenor: Jo Hurse
Phone: (03) 9283 2052 **Email:** jo.hurse@citywide.com.au
 **Upcoming working bees:**
Dates: Sep 14, Oct 12, Nov 9, Dec 14 **Time:** 1pm-3pm

Friends of Long Hollow Heathland

Convenor: Rob Saunders
Phone: 0417 357 345 **Email:** robsaunders357@gmail.com
 **Upcoming working bees:**
Dates: Sep 29, Oct 27, Nov 24 **Time:** 1pm-3pm

Friends of Merindah Park & Urban Forest

Convenor: John de Cruz Douglas
Phone: 0417 386 408 **Email:** jdecdouglas@internode.on.net
 **Upcoming working bees:**
Dates: Oct 13, Nov 10, Dec 8 **Time:** 9am-11am

Friends of Mother Stock Areas

Convenors: Pauline Reynolds and Rob Saunders
Phone: (03) 9598 6368 **Email:** pauline.reynolds.au@gmail.com
Phone: (03) 9515 3383 **Email:** robsaunders357@gmail.com


Friends of Native Wildlife

Convenors: Anne Jessel & Elizabeth Walsh
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

Contact: Jo Hurse for further working bee information
Phone: (03) 9283 2052 **Email:** jo.hurse@citywide.com.au
 **Upcoming working bees:**
Dates: Oct 9, Nov 13, Dec 10 **Time:** 9.30am-11.30am

Friends of Ricketts Point Landside

Convenor: Sue Raverty
Phone: (03) 9589 2103 **Email:** sueraverty@gmail.com
 **Upcoming working bees:**
Dates: Sep 17, Oct 15, Nov 19 **Time:** 1pm-3pm

Friends of Table Rock

Convenor: Jo Hurse
Phone: (03) 9283 2052 **Email:** jo.hurse@citywide.com.au
 **Upcoming working bees:**
Dates: Sep 24, Oct 29, Nov 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



Donald MacDonald Reserve

Volunteer Working Bee

10-12pm
 First Sunday of the month
 Meet at the statue on Haydens Rd
 All are welcome to attend

- 6 October
- 3 November
- 1 December

Magpie photo by Belinda Raymond
 Contact Anna Malone, Environmental Volunteer Support Officer via email AMalone@bayside.vic.gov.au or phone 9599 4815.

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

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:** elizabethjensen@outlook.com
Website: www.marinecare.org.au

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 banksia@bayside.vic.gov.au

Copy deadlines

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Banksia Bulletin is published quarterly by Bayside City Council to service people interested in enjoying and protecting the local environment.

If you would like to be added to the Banksia Bulletin mailing list, please contact Bayside City Council on 9599 4444 or email: banksia@bayside.vic.gov.au Please indicate whether you would prefer to receive your Banksia Bulletin by email.

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Sundew (*Drosera*)
by Pauline Reynolds