

Kona-konaba

Munibung

Musings

Magazine of the Munibung Hill Conservation Society

Promoting Urban Ecology for a Nature Positive Future



Spring Issue

**LIKE A SECOND
BACKYARD**

**BIG LITTLE BUG
LOVER**

READER ALERT:
Confronting photo
inside

**TO KNOW WHERE
WE ARE**

**CELEBRATING HOW
MUMS RAISE KIDS**

*Singer/songwriter
shares memories*

**ROAD TO
EXTINCTION?**

Let there be night



Globe at Night 2025

January 21 – 30 July 16 – 25
 February 19 – 28 August 15 – 24
 March 21 – 30 September 14 – 23
 April 19 – 28 October 13 – 22
 May 18 – 27 November 11 – 20
 June 16 – 25 December 10 – 19

WWW.GLOBEATNIGHT.ORG
 Get Out and Observe the Night Sky!

Engage people worldwide in observing the nighttime sky.
 Encourage students and families to participate in citizen-science with a hands-on learning activity.
 Gather light pollution data from an international perspective to monitor sky brightness and its effects.
 Can you see the stars?

Logos: ISE, NOIR Lab, DarkSky, AURA

Globe at Night

Each month near the New Moon we can be a citizen scientist by adding to the global data base.

Help chart how light pollution changes over the years. Your / our input is vital to collect as many readings as possible over a large area.

If we can't do it on a regular monthly basis, perhaps every February we can make a contribution to our local data base (or at other times of the year if we are able to).

<https://globeatnight.org/>

Feedback

Thank you for the positive messages expressing support for the new layout of MM.

The PDF version maintains the familiar scrolling method for reading, but the FlipBook version has proved very popular with a preference for this two pages opening format by most readers.

Congratulations on the new format! Can just imagine turning the pages! Thank you. - J.B.

Once again MHCS has published an extensive magazine full of information. Thank you. I'm amazed at the variety of topics which are covered. - W.L.



Vale Jane Goodall

"Dr Jane Goodall was able to convey the lessons of her research to everyone, especially young people," said Audrey Azoulay, director-general of UNESCO, the UN cultural agency.

Dr Jane Goodall DBE, UN Messenger of Peace and Founder of the Jane Goodall Institute died on October 1, aged 91. She was in California as part of her speaking tour in the United States.

Quote Message

She was a tireless advocate for the protection and restoration of our natural world."

Nightscape
 #100 | June 2025

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Into the blue
 Understanding marine light pollution
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DarkSky Approved program gets updates
 Page 6

Seven new Dark Sky Places & Lodgings
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JUNE 2025 ISSUE

Nightscape

- **Into the blue: Understanding marine light pollution**
- **Protecting sea life with smarter lighting**
- **DarkSky Approved: Practical tools for reducing light pollution**

+ more

Nightscape magazine: [Link to read this issue of Nightscape](#)

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Munibung Hill Conservation Society

Munibung Hill Conservation Society is a not-for-profit organisation. The Society has no paid staff. The generous contribution of people volunteering their time and expertise is how the Society is able to deliver on its Vision for Munibung Hill.

Projects that align with the Society's goals and contribute to building a Nature Positive future are supported on a case-by-case basis. Some of these are conducted in a partnership manner with other groups. Advocacy is the primary means by which the Vision and projects are delivered.

Financial contributions are appreciated. Offers of help are welcome.

The name Munibung Hill was gazetted at the NSW Geographical Names Board on December 23, 1977. There is no record of why this name was chosen. It was not the given name by the Awabakal people, on whose Country she is located. Kona-konaba was the aboriginal name, meaning place of ochre.

Kona-konaba is situated within an area administered by the [Biraban Local Aboriginal Land Council \(LALC\)](#), one of five LALCs within Awabakal Country. More background information [About Munibung Hill](#) on the MHCS website.

Munibung Musings (MM) is published as a digital magazine by Munibung Hill Conservation Society (MHCS). Produced as a bi-monthly MM, along with the MHCS website it is one of the means by which the Society advocates for the conservation and protection of Munibung Hill / Konna-konaba, as a significant geological and ecological landscape with immense cultural heritage values.

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Other sources: As referenced throughout.

Content ideas are welcome. Send with full contact details including mobile contact number to:

The Editor, Munibung Musings, MHCS
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In addition to our Vision for Munibung Hill the Society aims to advance a community of well-informed people who are committed to and passionate about finding science based solutions to the many threats confronting the natural world for which we have accepted responsibility and - in recognition that we are all intertwined - the wider world beyond, including night sky conservation.

See stories inside ...



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Munibung Hill Trails
275 likes • 305 followers

On the cover:

Ringtail Possum finds shelter to call home in a nestbox installed by the Woodrising Natural Learning Centre children at Munibung Hill.
Photo: Belinda Turner

Munibung Hill Conservation Society advocates for the protection of Munibung Hill as a place of great significance for first peoples. We pay respects to Elders past, present and emerging. We work to achieve recognition for this land as being occupied by Aboriginal people of the Awabakal nation that was never ceded.

Earth Law - first law

TO IGNORE Earth Law is the sure way to become poor.

To define wealth solely in financial terms is to be myopic. Just as to speak about health only in terms of human health without including planetary health and the health of all species we share the Earth with, as if their health doesn't matter, is shortsighted to say the least.

What matters to them, by extension matters to us. Only an arrogant species would take such a position. It has done us no good thus far.

We talk about personal wealth referring to money as if it had some substance to it. But money is a made-up human construct. It has no currency outside human society. As Herman Daly reminds us,

"The economy is a wholly owned subsidiary of the ecology".

Every financial transaction creates a debit within ecological society. And that debt is best repaid sooner rather than later.

We speak about society as if human society was something specific, special and unique to us. What about cockatoo society, bee society, dolphin society, eucalyptus society, fungi society (one of the oldest on Earth).

If our narrative about health and wealth is not inclusive of the other-than-human species - and societies - then the narrative is deficient, lacking in the understanding that what we do to them, we do to us.

It was Jesus who said that acts of kindness and compassion towards "the least of these" are acts of kindness and compassion towards Him.

"The least of these" refers to the marginalised, vulnerable, and those in need, such as the hungry, thirsty, strangers, naked, sick, or imprisoned.

The parable emphasises that how we treat those less fortunate is a reflection of our character and will be judged by God.

We hardly need reminding that there are many many native animals that are marginalised, endangered, vulnerable, imprisoned.

This has happened on our watch. While it might be plain sailing for us, it's been anything but a smooth ride for wildlife who've had their habitat wiped out in the name of progress - in the name of growing human financial capital at the expense of natural capital.

One day - as the saying goes - *the chickens will come home to roost*. It would be wise to do an audit now, to establish some realistic baselines from which to measure getting closer to or further distancing ourselves from our goals of a regenerative society, living within the carrying capacity of the ecology this society is embedded within. MM

The phrase "the chickens come home to roost" is a proverbial expression that conveys the idea that bad deeds or mistakes will eventually catch up with the person making them. It emphasises that actions have consequences, and one must face the repercussions of their past decisions. The phrase has been used in English for centuries, with its origins traced back to Geoffrey Chaucer's work in the 14th century.

To know where we are

DO WE KNOW where we are? Literally? Know where the 'ship' is? Where we are anchored?

Not just the address as in the street and number, but where we are located within the ecology, the catchment?

Are we in the upper portion of the catchment, next to a creek bank, or near the top of a ridge? Where are we?

It's almost impossible to know where we are when we've got all these other voices vying for our attention, blocking out the voices of the other-than-human-species we share this 'where-we-are' place with.

We have plonked ourselves in their 'territories' and surrounded ourselves with all our trappings/possessions that by their very essence distances us from them.

Then we go off to someplace else - work or school or play or entertainment - only returning to 'roost' overnight before going off again.

Is it any wonder we have no real allegiance to this special place within the catchment. That we have no desire to know where we are in an ecological sense, sharing the place with myriad other species that have been here for eons before we even set foot anywhere near them, but upon whom we totally depend in spite of our total disregard for their welfare.

We wouldn't even use the word welfare within that context, considering it to be exclusively for human use.

The reality is this. Catchment dwellers all are we. Honing some skills to better live within the catchment of country should be a high priority.

Understanding that we can't *grow a finite planet* would go some way to helping us live within the limits of the catchment. For each catchment comes with its own special characteristics and requirements.

We can't plonk one set of understandings into another. Once we acknowledge this, we then realise that there is no substitute for clean air, drinkable water, healthy soil, pollinators, fungi, plants and invertebrates. None! Not one!

Caring for catchments needs to be a much higher priority for each of us - and for local and state government agencies - than is currently the case.

Ref: Richard Louv, Vitamin N - for Nature

More than an inclination for nature

A PENCHANT for the protection of nature reflects a deep appreciation and commitment to preserving the natural world.

This can manifest as a personal interest, a professional focus, or a broader movement aimed at conserving biodiversity, ecosystems, and natural resources for current and future generations.

Environmentalists and conservationists share this ethos, but why limit a penchant for protection to these people. Don't we all need this kind of ethos? MM



Urgent need to reorient our thinking - to stem the extinction of experience tide

Human connection to nature has declined 60% in 200 years, Patrick Barkham, [The Guardian](#), 9 Aug 2025

Prof Miles Richardson says people risk 'extinction of experience' in the natural world without new policies.

People's connection to nature has declined by more than 60% since 1800, almost exactly mirroring the disappearance of nature words such as river, moss and blossom from books, according to a study.

Computer modelling predicts that levels of nature connectedness will continue to decline unless there are far-reaching policy and societal changes – with introducing children to nature at a young age and radically greening urban environments the most effective interventions.

The study by Miles Richardson, a Professor of Nature Connectedness at the University of Derby, accurately tracks the loss of nature from people's lives over 220 years by using data on urbanisation, the loss of wildlife in neighbourhoods and, crucially, parents no longer passing on engagement with nature to their children.

The modelling predicts an ongoing "extinction of experience" with future generations continuing to lose an awareness of nature because it is not present in increasingly built-up neighbourhoods, while parents no longer pass on an "orientation" towards the natural world. Other studies have found parental nature connectedness is the strongest predictor of whether a child will become close to nature.

"Nature connectedness is now accepted as a key root cause of the environmental crisis," said Richardson. "It's vitally important for our own mental health as well. It unites people and nature's wellbeing. There's a need for transformational change if we're going to change society's relationship with nature." [MORE HERE](#)

In Vogue

What's in. What's out. What's behind something being 'in-vogue' or 'out-of-vogue'.

We know one thing. Munibung Hill is neither in nor out for anyone who knows her well. She never ceases to offer up new ways of seeing life and the world.

No two visits are the same. It's a truism that we never set foot in a stream that is the same as the last time. For the water has moved on, and a fresh water experience is to be had when next we set foot in the stream.

So it is with Munibung Hill. Old as her hills are, the changes on a daily basis are *there for the aware*.

A fresh shoot in Spring with flowers to admire; shade from the heat of the summer sun; changes with each rain event in autumn; forests to shelter from the chilly winter winds. Birds, lizards, insects, all going about their lives whether we notice them or not - thank goodness that they do.

Never out of vogue, Munibung Hill is a work of wonder. An ancient land offering solace and renewal. 'Veteran' in every sense of the word.

MM

Earth-centred leadership is urgently required

Unless somebody leads nobody will - why not us ... Ray Anderson, Interface Inc.

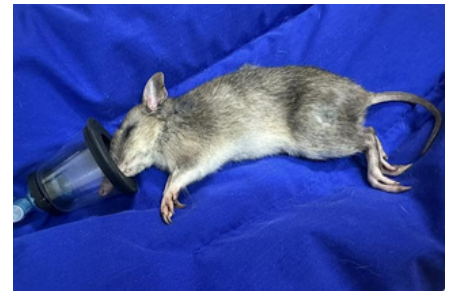
Where there's a vacuum, a void, there's an opportunity to fill it.

It would seem that for most people the sky is a void, a nothing space where nothing lives.

A space that at least at night, can be filled with artificial light. Known as ALAN – artificial light at night.

Our aim - at the Urban Night Sky Project - in association with Dark Sky International (DSI), is **to nudge the current narrative** written in to policies and practices, such that they embrace ROLAN – responsible outdoor light at night – as set out in Best Practice Lighting guidelines produced by DSI.

We can all be a party **to nudging the narrative**, to embrace ROLAN. *We invite you to join this night-sky-friendly party.*



Vet urges owners to keep animals indoors

FERAL CATS have become Australia's most costly invasive species, with efforts to control their populations exceeding \$18 billion to date.

In: **Sad find in Aussie garden as Aussie state looks to introduce new pet rules**, [Joe Attanasio, Yahoo News](#), 11 May 2025, reports that:

A bandicoot in Wollongong had been attacked by a cat.

Another sobering reminder of the toll domestic and feral cats take on Australia's native wildlife has surfaced, as the nation's most populous state moves closer to introducing stricter pet containment laws.

A vet in Wollongong, on the NSW South Coast, shared yet another casualty of a cat attack, urging owners to keep their animals indoors.

The bandicoot was presented to the Austinmer and Helensburgh Veterinary Hospital "in shock" after being found in a resident's garden. "After veterinary examination, it was found to have wounds consistent with a cat attack," the clinic wrote online.

"Thankfully, X-rays showed he was fracture-free. His wounds were flushed and cleaned, and the bandicoot was able to head straight into care with a local WIRES volunteer."

"Billy the bandicoot was lucky. Sadly, most end up needing to be put to sleep with cat attack injuries."

**We can't grow a finite planet.
Why do we even try?
Endless growth is an oxymoron,
There is no Planet B. C or D
Only this one amazingly
beautiful Planet A.**

The case for being an equal partner in how we garden

WE REGARD gardens as our personal dominions, where we can create whatever worlds we desire.

But they are also occupied by myriads of other organisms, all with their own lives to lead.

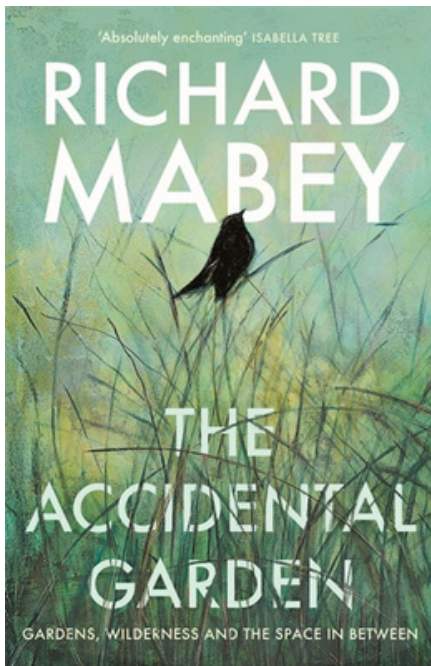
The conflict between these two power bases, Richard Mabey suggests, is a microcosm of what is happening in the larger world.

In [The Accidental Garden](#), based on the daily dramas of his own Norfolk garden, Mabey offers a different scenario, where nature becomes an equal partner, a 'gardener' itself.

Against a background of disordered seasons he watches his 'accidental' garden reorganising itself.

Ants sow cowslip seeds in the parched grass. Moorhens take to nesting in trees. A spectacular self-seeded rose springs up in the gravel.

The garden becomes a place of cultural and ecological fusion, and perhaps a metaphor for the troubled planet. This is vintage Mabey, maverick, intensely observed, and written with an unquenchable sense of wonder.



On losing our memory

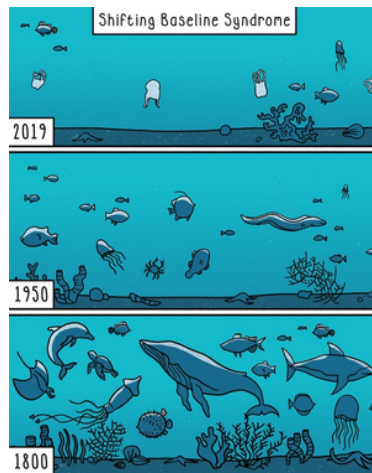
A [shifting baseline](#) (also known as a sliding baseline) is a type of change to how a system is measured, usually against previous reference points (baselines), which themselves may represent significant changes from an even earlier state of the system that fails to be considered or remembered; and so we have a perceived baseline versus an historical baseline of an organism or ecosystem.

The concept arose in landscape architect Ian McHarg's 1969 manifesto *Design With Nature* [1] in which the modern landscape is compared to that on which ancient people once lived.

Shifting baseline process, [Sam Gandy, EcoHustler](#), 3 March 2025.

Insidious and invisible, it's a form of memory loss that's killing our planet.

- What causes shifting baseline syndrome and the threat it poses
- Recognising the problems
- How to lift declining baselines.



Comprehension

WHEN AT school and we were taught to read and write, we were also required to do comprehension. Did we understand what we had read? Did we comprehend the meaning of the passage or story?

Is that one of the things we are missing today? Not only are we unable to read the land or know we live in a catchment, but in whatever interaction we have with nature, we no longer comprehend what it is we are a part of.

Here we are, long out of school and we don't know, can't comprehend the dire straits we are in. At least sufficiently to motivate us en masse to get the mess we've created sorted out. MM

Celebrating how Mums go to great lengths to raise and care for their kids

In: **Nature's Best Moms: 14 Incredible Animal Mothers**, [Edward Clark, AOL](#), July 30, 2025, writes that:

"Parenting in the wild isn't for the faint of heart, and yet so many animal moms rise to the challenge with surprising creativity."

These remarkable mothers deserve a closer look for the lengths they go to keep their young alive and thriving.

We feature four here in this issue of MM as examples ..

Orangutans

In dense rainforests, an orangutan mother spends her days teaching survival skills one treetop at a time. She crafts a fresh leafy bed every night, sometimes thousands over her lifetime. This long apprenticeship, lasting up to eight years, makes orangutan Mums some of the most patient teachers in nature.



Wolf Spider. Photo: Australian Museum .. <https://australian.museum/learn/animals/spiders/wolf-spiders/>

Wolf Spiders

A wolf spider mother never leaves her eggs unattended. She carries them in a silken sac attached to her spinnerets as she hunts and lugs them around until they're ready to scurry off. This behavior is one of the most hands-on examples of arachnid parenting ever recorded.

Koala

Koala moms raise their young with an unusual trick. Long before a joey can chew eucalyptus, she feeds it pap, a special droppings mix that preps its stomach. Once strong enough, the youngster clings to her back and learns which trees hold the tastiest leaves.

Gray Kangaroo

A gray kangaroo's reproductive rhythm is astonishing. She can pause the development of an embryo if conditions aren't right, all while caring for a joey already in her pouch. Sometimes she nurses two young of different ages at once producing two types of milk to meet their needs.



Woohoo Thank you

The Light Pollution Regulation and Dark Sky Preservation petition* exceeded the required 10,000 signatures. It will now be submitted to Federal Parliament.



“

“Smart lighting regulation is a win-win. It helps protect wildlife, cuts energy use, improves human health, and restores the wonder of a starry night sky.”

Professor Euan Ritchie
Deakin University

“

“Microbats help maintain ecosystem health by keeping insect populations in check, but artificial light reduces bat diversity and activity.”

Dr Kaori Yokochi
Deakin University



NOTE:

12,144 signatures to be exact
To all those who responded to
our special email request, we
are very grateful.

Biodiversity Council member and Deputy Director of the University of Western Australia Oceans Institute Professor Nicki Mitchell said, “A baby sea turtle entering the water for its first swim is awe-inspiring. It’s less good to find them wandering through coastal car parks. Keeping hatchlings in the dark is key to giving them the best start in life”

Bat expert Dr Kaori Yokochi at Deakin University said, “Microbats help maintain ecosystem health by keeping insect populations in check, but artificial light reduces bat diversity and activity. Light pollution regulation will help these tiny superheroes thrive in our cities,” said Dr Yokochi.

Invertebrate expert and Biodiversity Council member Dr Jess Marsh from the University of Adelaide said, “Light pollution is a trap for night flying insects like moths, disrupting movement patterns, life cycles and exposing them to predators. Light pollution regulation helps free them from this threat, ensuring these small but important creatures can continue their important functions in the ecosystem.”

Experts back petition for national light pollution laws to protect wildlife and starry skies, Biodiversity Council, 11 Sept., 2025
[FOR MORE CLICK HERE](#)

*Petition EN7346 - National Legislation for Light Pollution Regulation and Dark Sky Preservation

Petition Reason

Light pollution caused by excessive Artificial Light at Night (ALAN) has harmful effects on human health, is harmful and disruptive to vulnerable species of flora and fauna, and has negative impacts on the economy, including placing unnecessary loads on electrical infrastructure, which leads to increases in greenhouse gas emissions and climate change. Reducing ALAN not only helps to reduce the harmful effects listed above, but can also lead to benefits, such as making streets safer by reducing glare and light trespass, and increasing Astrotourism.

Petition Request

We therefore ask the House to introduce legislation to limit light pollution and ALAN, including public and private exterior illumination, ensuring that lighting is only used when and where is it necessary, and is limited to levels which are safe and fit for purpose. Countries such as France, Germany and Croatia have already successfully introduced such legislation which limits light pollution and ALAN.

[SOURCE: AUSTRALIAN PARLIAMENT](#)

National petition launched to keep regional skies dark for future stargazers, [Craig Duncan](#), South Western Times, 19 September 2025

A new petition pushing to protect dark skies across Australia will soon be presented to Federal Parliament with close to 11,000 people adding their names in support.

The Australasian Dark Sky Alliance launched the petition which states that: light pollution caused by excessive artificial light at night has harmful effects on human health and vulnerable species of flora and fauna while impacting on the economy and limiting astrotourism opportunities.

[MORE HERE](#)

Sonder - to realise it or not, everyone has a story to tell.

A decade of raising kids ‘in the tranquility of Munibung Hill’

To know your children are safe and within hollering distance brings a sense of quiet relief that we are hard pressed to find these days.

No sense hankering for the past, but there are times when it’s nice to recall what is considered for some of us, the best of times. Maureen O’Brien reflects:

I BOUGHT my first home in Macquarie Hills when my children were 9 and 8. We spent 10 years living in the Munibung Hills catchment; but that was years ago now.

I discovered after just 4 days that a client of my workplace who I was friendly with, had moved into the same cul de sac – just 2 doors apart.

The meeting was hilarious! We became firm friends from that moment and have remained friends to this day, although we’ve moved around many times since then.

‘Then’ was over 45 years ago. My son and her three boys became best mates, her daughter and mine became friendly.

We raised our kids together for some ten years in the tranquility of Munibung Hill. Both of our homes backed onto the bushland that was there then.

We knew that when the sun was up, the kids’d be out exploring, playing, adventuring on Munibung. They were safe, they were within hollering distance.

They were nurturing friendships, connecting with nature, testing boundaries, and dreaming as kids could, back then.

For our boys, they were four, of around a dozen other boys of similar age in the suburb, who tended to hang around together from time to time - and then there were the ‘outsiders’ who came to visit Munibung Hill – not always with the best of intentions.

The noise of their dirt bikes kicking up the tracks would be a source of acrimony. That became a learning opportunity about sharing and caring – with mixed results!

It was a decade of making memories in a peaceful community that still echos today.



Maureen O'Brien is a singer / songwriter who tells a good yarn in a variety of ways as shown below. Her connections with Munibung Hill have left lasting memories that we are pleased she is willing to share with us. Photos: supplied



◆ MORE ABOUT MAUREEN:

- Website: www.maureen.com.au
- Facebook: www.facebook.com/mymaureenobrien
- Bandcamp: <https://maureenobrien.bandcamp.com/>
- YOUTUBE links:
- Music: www.youtube.com/@mozluminous
- Comedy: www.youtube.com/@sidestepcomedy
- Stories <https://www.youtube.com/@MeetingArts2300>

Like a second backyard

In the ever growing urban sprawl, Munibung Hill is a unique stand out landscape.

“Munibung was literally out our back gate when we were growing up”. The personal reflection of a childhood that has left indelible happy memories.

AFTER SCHOOL and at weekends, it was our safe place to go exploring, let off some steam, get creative, and learn about the natural world, says Gina.

It was like having our very own Hobbitland on our back doorstep to go ‘there and back again’ on big adventures and undertake quests whenever we wanted to!

The thing I remember most about Munibung Hill was the abundance of paperbark trees within its dense and unspoiled natural beauty.

Today, it’s uncommon to find a paperbark tree, especially in suburbia, and its status is vulnerable at both state and national levels.

As a child I found them fascinating. Even then I knew they were so special and unique that they needed protecting - I didn’t need an adult to tell me that and would have never learned it without the opportunity to explore.

In the ever growing urban sprawl of the Hunter, there aren’t many places left like it.

Children need safe spaces to explore, grow their creative brains and learn about nature beyond their electronic devices and back yards.

Natural swathes of ecosystems provide learning and experiences they simply cannot get by going to a park, reserve or zoo.

Just as important: the natural world needs vast stretches of protected, safe spaces - not merely wildlife corridors, as important as they are - that enable our unique species and ecosystems to thrive, which, in turn, improve the air, water, soil and quality of life for the humans around it.

Sadly, today those gorgeous paperbark tree forests at Munibung Hill are all gone, covered by yet more industrial and housing estates.

It’s important to protect and conserve what’s left of the native patch at Munibung Hill.

~ Gina ~



Paperbark by name and paperbark by nature, the unique and artistic bark of the Melaleuca tree makes for a stand out feature in any setting and no less here at Neegulbah Park, Macquarie Hills.
Photo: Stuart Carter

Smaller than small, tiny little often hidden ones

Invertebrates are lifters that pack a punch way beyond their size. In spite of this, we invariably overlook the enormous contribution they make to our quality of life. We need to **celebrate the invertebrate**.

Invertebrates - who are they?

Invertebrate animals make up around 55% of known Australian biodiversity and > 95% of known Australian animal diversity. We humans tally up to be < 5% of the total.

They are fascinating and absolutely crucial to the functioning of ecosystems. However, they are largely ignored in conservation planning despite hundreds of species listed as threatened.

This is an urgent problem that needs solving if we are to ensure that ecological and economic systems remain stable. Invertebrates are insects, spiders, crabs, worms, snails, jellyfish, sponges, urchins and their relatives, and there are currently about 100,000 species in Australia which have scientific names.

That might sound like a lot, but it's only around 30% of the actual number of species thought to exist. This means that about 70% of Australian invertebrates, or roughly 200,000 species, remain unknown to Western science.

To study Bugology, to be a Bugologist

To be a bit of a bugger is to be a tad difficult to get along with, to bugger off is to be told to get out of here; but to be interested in Bugology is something to be proud of and extending from that, to be a Bugologist. It's an informal term for an entomologist, a scientist who studies insects. While the technical term is "entomologist," which derives from the Greek word for insect, "bugologist" is sometimes used, though less formally.

Ray Woods is an amateur Bugologist - check the story coming up. We feature some of Ray's close up photography of the bugs and under-celebrated creatures that live at Munibung Hill. The ones we take for granted or despise or fear or spend time avoiding. But not Ray. He's fascinated by them and thinks we ought to pay them more attention, with the hope that we might become Bugologists too.



The Sustainable Neighbourhood Alliance display board at the Living Smart Festival, Speers Point Park, Saturday, 20 September.

People who pay particular attention to what's going on in relation to a particular aspect of nature, a fungi, a plant, an animal, or ecosystem. "A person who is a 'looker-er' would be: Tiwalinga." - Miromaa Aboriginal Language and Technology Centre, Boolaroo.

Through the lens with Eddie ...

Editor: Our conversation with Eddie Bernard continues to reveal the variety of wildlife that lives at Munibung Hill and visits their yard over the course of the year, providing ecosystem services at no charge.

EDDIE BERNARD: There's a couple of butcher birds up in that tree, and there's their nest.

Eddie feeds some of these birds.

MM – Darryl Jones, Griffith University, Qld has written a book about feeding, which a lot of people don't approve of, but he says Australia is one of the few places where we don't.



EDDIE: See there's a bit of a platform in that tree. That's where they nest.



**SAVE LINK ROAD FOREST
Rally & Campaign Launch**

Launch by
RICHARD DENNISS
The Australia
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AUSTRALIA 20-26 October



20 minutes
Just spend 20 minutes in your favourite outdoor space and tell us about the birds you see during that period.



Count the birds
You can submit your results using the app or the web form.



Submit your count
You can count as many times as you want. Every count helps.

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Is there a possum in the house?

Patience pays off for young citizen scientists. Belinda Turner reports ...*

The elusive glossy black, hide and seek with a golden whistler, and a mystery creature – all in a day's work for the children of Woodrising Natural Learning Centre.

Imagine spending your time building a home for a possum, placing the home in a tree and coming back just to find the home empty. Time wasted?

Imagine spending your days searching for evidence of glossy black cockatoos - collecting seed pods and trying to determine how fresh they were, carefully placing wildlife cameras to try and capture the elusive bird we had been researching, but to no avail. Wasted effort?

Imagine finding so many fresh diggings that you were sure bandicoots must be around. After all, you had looked in the field guides and done the research, you knew the signs. But you kept moving your wildlife cameras and couldn't manage to catch a glimpse of one. Time wasted?

Is there such a thing as time wasted as you develop your knowledge?

Is there such a thing as time wasted when you discover the places animals don't hang out?

Let's flip the narrative... imagine building a house for a possum and placing it in a tree. The next time you visit there is a possum calling it home. Surely you would be excited! But would you remember the journey that all happened so quickly? Would you continue to research and learn more along the way?

Imagine finding evidence of glossy black cockatoos and then seeing one in the tree. Sure, it would be exciting but is that where the story would end? Would you continue to research what they eat, where they nest, look for more evidence and continue to search and learn for almost a year?!?! Probably not!

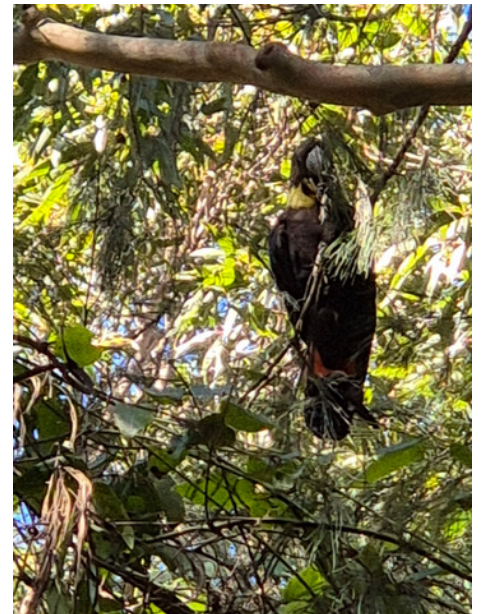
If you saw a bandicoot the first time someone told you what a digging might be from, would you continue to learn more? Look for new diggings? Discuss the differences between a bandicoot and other animals? Most likely you wouldn't.

So is any time really wasted when you engage in citizen science?!?! The constant observing, searching, researching, discussing creates a mental file card in your brain.

You really learn and take in information because you are always on the quest for something.

You need to learn more so that you can continue your search. The more knowledge you have the more successful your search is likely to be. So, you don't stop, you keep going, keep learning, keep observing, keep giving.

You keep practising your sensory awareness. 'Sit spots' help you to sit and focus on all of your senses. What can you hear? What can you see? What can you feel? What can you smell?



You sit with purpose and you really, really focus. Then you draw what you saw, smelt, heard and felt. Your mind is now attuned. So much so that you hear a sound. You look up into the tree and you notice a glossy black cockatoo feasting on the very seed pods you have searched for and examined for months!

The colours look so much more vibrant in real life. The bird is bigger than you imagined. No field guide could show you how the glossy black bangs the seed pod against the tree and uses its claws to manipulate its food. > continued next page >



Ringtail Possums have made themselves at home in purpose built nestboxes. Photos: Belinda Turner

Then you check the previously empty possum box you made, and you find a ring tail possum inhabiting the space. You smile widely as you realise YOU MADE A HOME FOR A POSSUM! Your work had meaning and you created change.

And then, finally, the wildlife camera reveals what you've been hoping for: a small, round creature scurrying across the bush floor. At first glance, you get excited – "A bandicoot!" The fresh diggings make sense. But then the questions begin.

Was it really a bandicoot? Or could it have been a bush rat? The long tail and body shape suggest otherwise. The discovery has become not an end point, but a beginning. A new opportunity for more research.

But not only did you capture the bush rat - you captured foxes, rabbits, birds and swamp wallabies. Plus another unknown creature. That unknown creature leads to new curiosities... What kind of animal could it be? What other local animals are there that we haven't discovered yet? What has such long legs?!?

We would like to say it's all in day's work for the children of Woodrising but really, it's all in several months work of researching, observing and being curious.

A lucky day brings amazing results, but that lucky day follows many months of being curious - the best thing we can learn to be.



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We continue to see the way that awakening our senses brings about a deeper connection in our children. They all of a sudden notice things that they hadn't seen before after they engage in a 'sit spot'. Nature connection games are a regular part of the program. We know that we need to know and love a space. And we need to slow down and connect to that space to observe things we wouldn't have seen otherwise.

What's that whistle in the tree? We can hear the loud sound. We stop, we look for signs of movement, we listen for another clue. A whistle in the trees. Another whistle gives away the location. Some of the children spot the bird. It's got a black head, a black neck, a black and white face.

They show their friends. But then it's gone again. Another whistle, we stare carefully into the trees looking for clues. Is there any movement? Another call. There it is! "Here, I'll show you" they tell each other as they again locate the bird. But what kind of bird is it? The bird does a dance of calling and waiting to be found. Each time we find it we observe all of the colours and distinctive features. We will have to check the field guide. But wait, is this bird playing hide and seek? Can birds communicate and interact with us?

An examination of the field guides reveal that the bird is in fact a Golden Whistler. The description says "Male conspicuous with loud call in spring" That is exactly the behaviour we observed.

Sometimes we set out with a plan on what we will do on each of our visits, but mother nature always seems to have a way of leading our adventures.

One thing is for sure, we always learn something new, and we always come away feeling connected - to each other and to the space we share.

*Belinda Turner is co-director of Woodrising Natural Learning Centre.



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A big little-bug lover shares his passion



ASSASSIN BUG

RAY WOODS HAS been a keen photographer for years, but it's only recently that he's taken to getting up close and personal with the little critters that for the most part are overlooked - but not by Ray.

He's fascinated with them and we are the beneficiaries of his eye for detail and curiosity to know more about the bugs that many people find scary.

But as Ray would have us know, they are for the most part disinterested in us, unless we threaten them. Would it be fair to call Ray a bug lover? More than that, Ray would have us pay greater attention to these small, seemingly insignificant animals that outnumber us thousands of times over.

Get to know your local bugs, is what Ray is encouraging us to do. Don't take them for granted. Don't spray them to death just because they look scary.

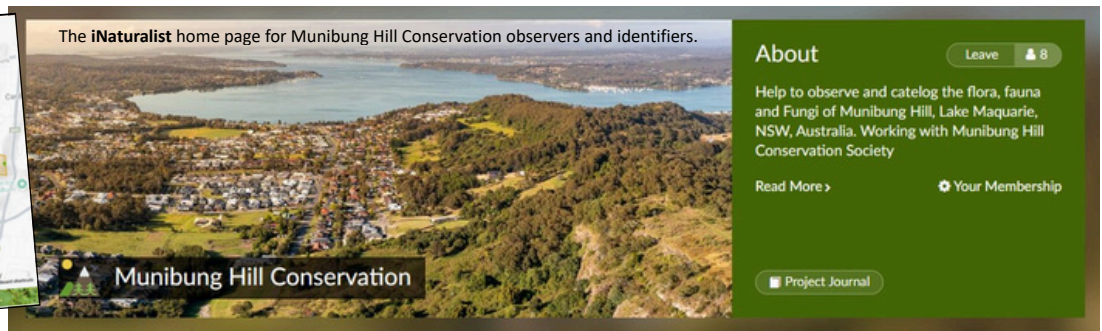
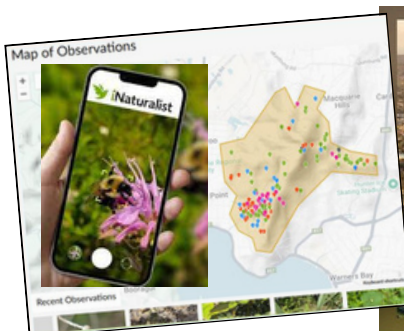
The ecosystem services that these species provide is something we need to celebrate and be thankful for.

They've been here for a very long time - and know a thing or two that we might be well advised to find out more about.

*Here we go.
The first in a series of
photographs
by Ray Woods,
taken on the North-
Eastern slopes of
Munibung Hill.*



CRUSADER BUG



A pet to rival those of the furry kind

The keeping of animals as human companions has been going on for centuries. Some go in and out of fashion, while others become so trendy that everyone seems to jump on the bandwagon. Now it's become a growth industry with hidden ecological consequences.

But as we are witnessing, in the case of cats and dogs, there can be some issues that raise concerns when the numbers swell and they are longer a benign companion, but also a bone of contention for people and other species, as has become the case over the last couple of years.

What if we expanded our view of what is considered to be a most desirable companion animal?

For a conservation society such as MHCS perhaps it would be in our collective interests to bring some other ideas to the table; to reflect on the ecological and financial costs; to broaden our horizon to be inclusive of how other cultures and periods in history have approached this.

In: **Bugs are popular pets in nature-loving Japan, buzzing with lessons about ecology and species**, Yuri Kageyama, Phys.Org, Edited by Andrew Zinin, August 8, 2025, reports that ..

THE PET OF CHOICE in Japan, as much as cuddly kitties and playful puppies, is the humble bug.

The bug has been a key part of Japanese culture from the Heian era classic "The Tale of Genji" to popular modern-day manga and animation like "Mushishi," featuring insect-like supernatural creatures.

Japanese people appreciate the glitter of fireflies let loose in the garden or the gentle chirping of crickets kept in a little cage. You can feed the bug pets watermelon, but special jelly pet food for bugs is also available at stores. Naturally, bugs are on sale as well, with the more esoteric ones selling for 20,000 yen (\$133).

Here, crawl and buzzing critters are not just relegated to the scientific realm of the entomologist working on a taxidermy of pinned butterflies.

Celebrities boast about their fascination with bug-hunting as their hobbies just like a Western movie star might talk about his yacht or golf score.



Children look at beetles at an exhibition devoted to insects in Tokyo, July 31, 2025. Credit: AP Photo/Yuri Kageyama

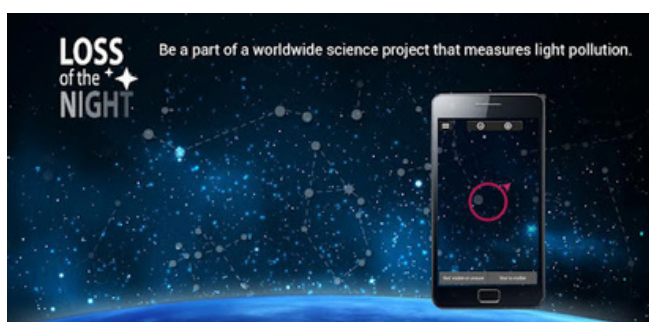
The bug as companion is an essential part of what's observed, enjoyed and cared for in everyday life, **reflecting a deeply rooted celebration of humankind's oneness with nature.**

"They are so tiny. If you catch and study them, you're sure to discover something new," says Munetoshi Maruyama, professor of bioenvironmental sciences at Kyushu University, whose fascination with bugs began as a child, like many Japanese.

"They are so beautiful in shape and form."

One thrill that comes from studying insects is discovering a new species, simply because there are more than 1.2 million known kinds of insects, far more than mammals, which translates to a lot of undiscovered ones, said Maruyama, who has discovered 250 new insect species himself and shrugs that off as a relatively small number.

[Full story HERE](#)



Measure sky quality with a smart phone. Here are the apps for Android and iPhone devices ..

Loss of the Night, sky quality meter for Android

https://play.google.com/store/apps/details?id=com.cosalux.welovestars&hl=en_AU

Night Sky Quality app for iPhone

<https://darksky.org/resources/software/>

In this hectic paced world where there doesn't seem to be time to appreciate the ordinary and with so much emphasis on human creations, art, buildings lit up at night, fireworks displays, the list goes on, let's bring back a word that's not in the regular lexicon, 'marvel'. To marvel. In this case, to marvel at those things we can easily overlook, take for granted. Our interest to revisit MARVEL was piqued by this story: **Will you look at that! Why we are delighted by random, beautiful marvels**, Patti Miller. The Guardian, April 6, 2025. Patti's story is [HERE](#)

MASTER OF MACRO



Orange/black ant portrait

This is a close-up of the head of a Carpenter ant (left), likely a *Camponotus* species, which are common in Australia.

These ants are also commonly known as sugar ants due to their attraction to sweet foods. They are not known to sting but can bite.

Carpenter ants vary in size and colour, ranging from 2.5 to 14mm in length. While some species nest in wood, many Australian species nest in the ground or under rocks. They are primarily nocturnal and forage at night. Credit: Copyright .. Bill Chambers, 2025

(below) Blue-eyed Lacewing



What attracts Bill Chambers to Macro?

Macro photography showcases subjects in a way that most people never see them - 'larger than life'.

"Focusing on extreme close-ups of tiny subjects allows the photographer to reveal intricate details and colours. The goal is to capture the texture and beauty of this miniature world, turning the ordinary into the extraordinary," says Bill.

My equipment on the day was an Olympus EM-5ii with 14-150mm f2.8 lens on larger subjects, and a 60mm f2.8 Macro lens for the tiny ones.

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“Strictly speaking, there is no such thing as human nature.

There is only nature and the very human expression of it.

*Nature then, is not something out there. We are of it and in it.”**

- Dr Ian McCallum *

To love nature is to be true to our natural selves

Are We Born to Love Nature?

Dana Klisanin Ph.D. Psychology Today, April 9, 2025 - The science behind our innate connection to the natural world.

<https://www.psychologytoday.com/us/blog/digital-altruism/202504/are-we-born-to-love-nature>

This is a question that’s been haunting me, says Dana — in the best way — as I’ve guided individuals and groups through workshops designed to help us reconnect with the natural world.

Again and again, I’ve witnessed something extraordinary: when people begin to explore their ancestral connection to the Earth, something awakens.

It’s not just sentiment. It feels more

like a dormant faculty reactivating—a sensory remembering that seems to arise from somewhere older than personal experience. I’ve come to think of this as *biophilic inheritance: a layered connection to the Earth* that may be carried forward not only through cultural memory and story, but potentially through biological mechanisms as well.* To understand this more fully, we can turn to science.

Tracing the formation of tracks - for 'today we walk where once they walked'

BY ONE interpretation, it could be claimed that all tracks at Munibung Hill are examples of 'desire paths', some older than others but over thousands of years, formed by many feet tramping along the same way - following in the footsteps of those who had gone before.

They had, for want of a better word, beaten the grass and land into a surface conducive to walking along - forged a new way in their wayfinding explorations.

By another world view some, such as the tracks that follow the ridges, are more likely following indigenous walking songlines.

Others may be more recent, such as those at the southern end.

These make up what we have today, but they are not fixed. Evolving would be a more appropriate description.

Fulfilling the desire to go for a walk - a walk with purpose, is what would have been the case.

These walks have history, adding to history. The desire might include:

- finding the shortest way,
- taking in the most panoramic views,
- to search for and study plants and animals or fungi inhabiting the area,
- or it might be to follow a known path that friends have enjoyed.

It would be remiss and disingenuous of us to omit the original 'desire path' inhabitants. For in reality, native animals indigenous to the land over millions of years have been traversing the landscape, making inconspicuous paths as they go about their daily lives. Being soft footed - unlike the hard hooped imports such as beef cattle, or for that matter hob-nailed boots of new settlers - they left no trace of their travels.

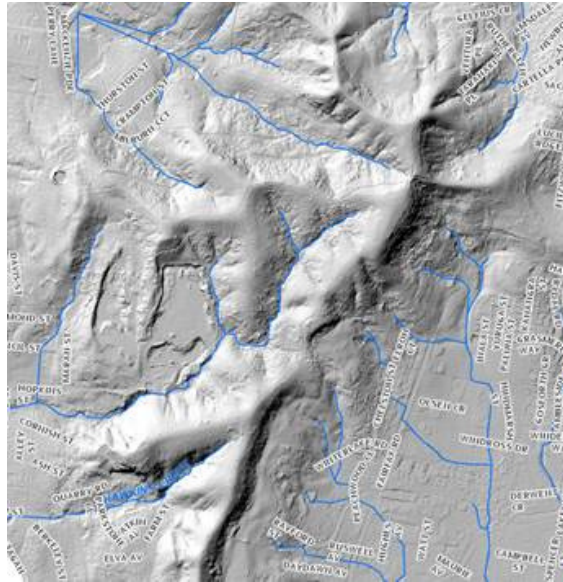
There must be some lessons for us in this discussion about 'desire paths'. One of them would be to keep an open mind - to be aware of the Shifting Baseline Syndrome (SBS) and how it might help inform our future decisions and actions.

Further ...

A desire path or track is one that -

- side-steps the designated path
- charts a new course due to an obstruction in the way, or to
- access a desired end point destination
- follows a recommendation from previous walkers / visitors experience
- sets out in search of known or suspected attractions along the way or at the end, in the case of a linear path.

MM



Pedestrianism history explained

The Popularity and Politics of Pedestrianism, Betsy Golden Kellem, [JStor Daily](#), March 26, 2025

The sport of competitive walking touched on social concerns such as debt and poverty, fitness and fame, but it also found support in the temperance movement.

One of the most popular spectator sports of the late nineteenth century was "pedestrianism," that is to say, sport walking. Not just a decent walk, though, but competitive walking events that covered ultra-marathon distances. Spectators loved the mix of the athletic and the ridiculous, and they were more than willing to pay admission to watch athletes walk in circles.

Drama scholar Kirstin Smith explains that, at its mid-nineteenth-century height, pedestrianism gave everything but horse racing a literal run for its money. The public events came in all flavors. As she writes,

'A great range of walking and running performances by men and women included: races against the clock, one-on-one matches, individual journeys across vast distances, saloon performances in which pedestrians "walked the plank" for 30 hours straight, and—an 1870s innovation—six-day track races.

Munibungist

*Munroist – a person who over time has scaled all the peaks within the Munro mountain range in Scotland.

A way of describing these kinds of people within a Munibung Hill context would be - A Munibungist*.

Who do we know that might qualify to be a Munibungist?

Send nominations, with a few words explaining why you think we might include them on the Munibungist Register.

Taking our cue from the Munroists of Scotland, we're out to find the Munibungists of Munibung Hill.

Munibungist*

Scott Alder, Munibungist category of visitors *a person who has traversed all the major ridges / tracks within the Munibung Hill nature reserve.

There are many ways to approach a walk at Munibung Hill, with the decision about which way to go, whether or not to make it linear or a loop, often determined by the time of day and amount of time available.

Sights to behold in all directions

A walk at Munibung Hill arranged by National Parks Association, Port Stephens. Karen Nicoll reports ..



On a glorious sunny winter's day a group of NPA walkers met on Awabakal land at Speer's Point jetty.

The first highlight was spotting two ospreys in their nest near the lake. Our walk continued up to Quarry Rd where we started walking from the old quarry along the Tamarind Nature walk.

We passed a variety of plants including Native Tamarinds, Red Ash trees, Bird Nest ferns, Cabbage-tree palms and myriad ferns.

The Gondwana Rainforest track took us up to Biraban's Lookout where we were treated to expansive views over Lake Macquarie.

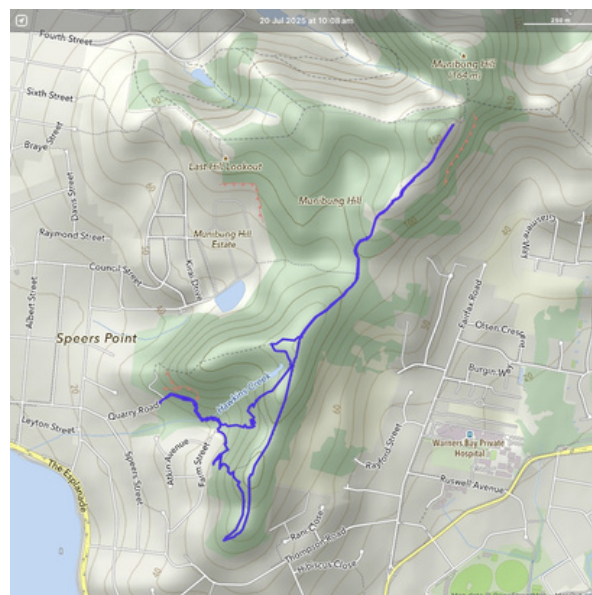
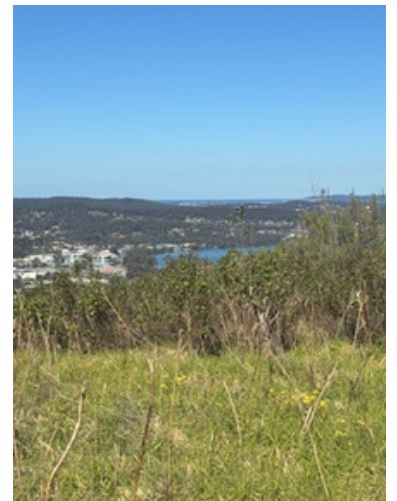


Birdsong wafted through the air. Allocasuarinas, Acacias and Spotted Gums lined much of the Songline track along the ridge – albeit the track in parts was badly eroded and overgrown with lantana and introduced grasses.

At the Ocean View Lookout, an open grassy area we spotted the ships out in the ocean waiting to come into the port. To the west the Watagans and Sugarloaf (another important Aboriginal Bora location) were visible.

On the return journey we meandered down another part of the pleasant Gondwana Rainforest track.

It was a delightful Sunday morning walk!



Map and photos courtesy: Karen Nicoll



Expanding our gaze to include Sky Country as it was known by indigenous people

“Great Weather for Ducks”

Vina Chubb, affectionately known as the ‘water-birds lady’ for us at Munibung Musings, reports on how the ducks are faring at the Biddabah Creek Wetland, Warners Bay.

The Biddabah Creek Landcare site surrounds a wetland area on Biddabah Creek, one of twelve creeks flowing down the eastern side of Munibung Hill. This area has become home to Pacific Black Ducks.

Pacific Black Ducks (*Anas superciliosa*), commonly referred to as PBDs, are dabbling ducks native to Australia and are the most common duck species found on the continent.

During the recent wet weather, a family of five ducklings was spotted at the site.

However, the survival rate for ducklings is often low due to wetland predators such as feral cats, roaming domestic cats, water rats, and tiger snakes. It’s a tough start to life for these littlies.

Sadly, the ducklings have not been sighted again recently.

Despite the cold and wet conditions, adult ducks remain at the site. They are well-adapted to survive harsh weather, thanks to a thick layer of body fat and soft down beneath their waterproof feathers.



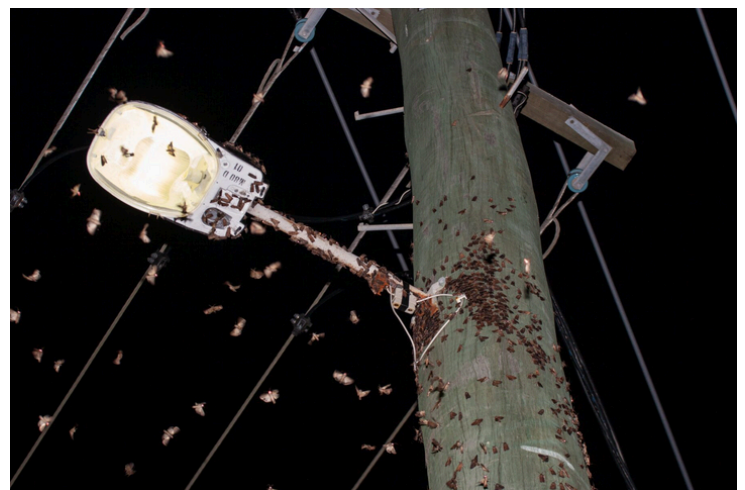
A pair of Pacific Black Ducks and pair of Purple Swamphens (above) at the Biddabah Creek Wetland Landcare site
Vina Chubb (right)



A powerful owl (*Ninox strenua*) roosts along riparian vegetation on a creek in north-west Sydney. Image credit: David Stowe

LET THERE BE NIGHT

by Marnie Ogg, *Australian Geographic*, July-August 2025, ISSUE 187 is a 7 page feature article that includes these pictures .. [FULL ARTICLE AT THIS LINK](#)



Bogong moths (*Agrotis infusa*) are being drawn away from their alpine breeding grounds to the glow of artificial city lights. Image credit: Ken Griffiths/shutterstock

Forest lasagna for greater diversity

Under storey plants tell another story, helping bring balance back into the forest mix of plants

It's the bigger bolder plants that grab our attention as we walk through the bush. But as we know there's more to life than the trees that make a statement simply because of their size. So here's to the little-ies, the understory species that are just as important.

We can liken these layers to what has been referred to as: The "**forest lasagna**". The metaphor effectively describes the layered structure of a forest, comparing it to a lasagna with multiple edible layers.

Each layer in the forest, from the canopy down to the soil layer, represents a distinct habitat with unique plants, animals, and conditions.

That was the purpose of planting 80 tubestock at the Lucilla Ridge Landcare site - Hill area - on 16 August; to boost the 'nutritional' components of the 'lasagna'. The more plant types and layers the greater the attractiveness of the forest to welcome more invertebrate species to visit and increase the resilience of the site.

This, along with all the other Landcare plantings, are 'legacy' projects that will benefit generations to come over the coming decades. Here's the tubestock list ..

Acacia implexa

Hickory Wattle, 5 – 15 metres

Breynia oblongifolia

Coffee Bush, 3 metres

Cymbopogon refractus

Barbed Wire Grass

Dodonaea triquetra

Hop Bush, 3 metres

Echinopogon ovatus

Hedgehog Grass

Entolasia stricta

Wiry Panic

Glochidion ferdinandi

Cheese Tree, 8 metres

Imperata cylindrical

Cogon Grass

Maytenus silvestris

Narrow-leaved Orangebark

4.5 metres

Microlaena stipoides

Weeping Grass

Myrsine howittiana

Brush Muttonwood, 3–10 m



Heidi Keft, co-team leader,
Lucilla Ridge Landcare group.



Behold the beauty of the blooms.

Step back a little and let nature in her own time do the regeneration. A site inspection on a recent Saturday morning, was full of surprises of the best possible kind. The Purple Beard Orchid, *Calochilus robertsonii* was in full bloom as was the Many Flowered Mat-Rush, *Lomandra multiflora*. Both species were on the original site where the group has been landcaring for 3 years. Photos: Jenny Mason, 27 September 2025





Red Ash tree in Hawkins Creek catchment area Speers Point. Photos: Gavin Ord



Just some of the products collected during the EcoAngel clean up. Photo: Gavin Ord

AND SO IT CAME TO PASS THAT THE ANGELS CAME DOWN TO LEND A HELPING HAND

Gavin Ord reports on an action that helped Munibung Hill breathe a little easier.

IT WAS a crisp Saturday morning when a small but determined group gathered at the Friends of Munibung Landcare site located at Parkstone Close Speers Point.

The team, comprising members from Cardiff Area Sustainable Neighbourhood Group (SNG) and Warners Bay Area SNG plus other volunteers came together for a cause, a quiet resistance against the creeping tide of human carelessness.

They came to clean rubbish at an Eco Angel clean up event in the remnant rainforest area.

Every piece picked up—a crushed aluminium can, a sun-bleached plastic bottle, a single tyre—felt like a small act of repair.

By noon, the team had filled a lot of bags and removed heavier items including tyres and a hot water system. The site, once cluttered, was now breathing again—open, alive.

As they gathered near the trailhead for a final tally, Gavin gave a nod of approval. “That’s over 30 kilos of rubbish cleared today. Every bit matters. You’ve all made a real difference.”

The group looked at the pile of bags, then out toward the expanse of bushland beyond. It still needed care, still needed hands and hearts willing to protect it. **But for today, it was a little lighter. A little cleaner.**

Because healing a place like Munibung Hill wasn’t a one-time job—it was a commitment.

And it started with just one bag at a time.

Ancient Roots & Natural Heritage

The Red Ash, (*Alphitonia excelsa*) features prominently in the Friends of Munibung Hill Landcare site, Parkstone Close.

We are fortunate enough to have some of the largest examples in our area.

It’s here that Red Ash trees grow alongside native tamarinds, elderberries, ferns and vines in a remnant pocket of native woodland that survived earlier clearing.

“These trees are part of Munibung Hill’s natural mosaic, hinting at what the bush looked like before urban development,” says Gavin Ord. “The Red Ash trees, though not rare, serve as a small yet important ecological link to that intact woodland environment”.

“In the Parkstone Close area where the Friends of Munibung Landcare site is located (Gavin is co-team leader of the group), Red Ash adds to habitat diversity, offering food and shelter to birds and wildlife.”

“Nest boxes have been attached to a number of our larger trees to enhance the nesting value even more.”

“The Red Ash is often one of the first species to reappear after weeding efforts have removed small leaved Privet and Lantana.”

“The tree often acts as a nursery plant allowing other species to grow and reestablish under the protection of its canopy. This is especially important in the hot months of the summer”.

Volunteers have also spent a hard-earned break under the cooling canopy of these beautiful and hardy trees, adds Gavin.



The Eco Angel Program is designed to help schools, community groups, businesses and individuals come together and keep Lake Macquarie clean all year round.

We will help by:

- Promoting your event and encouraging others to volunteer,
- Providing a free clean-up kit including litter bags, gloves, merchandise and appropriate paperwork,

Collecting and disposing of waste from the clean up. [Get the low down HERE](#)

CREEKS ARE LIVING LANDSCAPE FEATURES

Creeks of the north western slopes of Munibung Hill

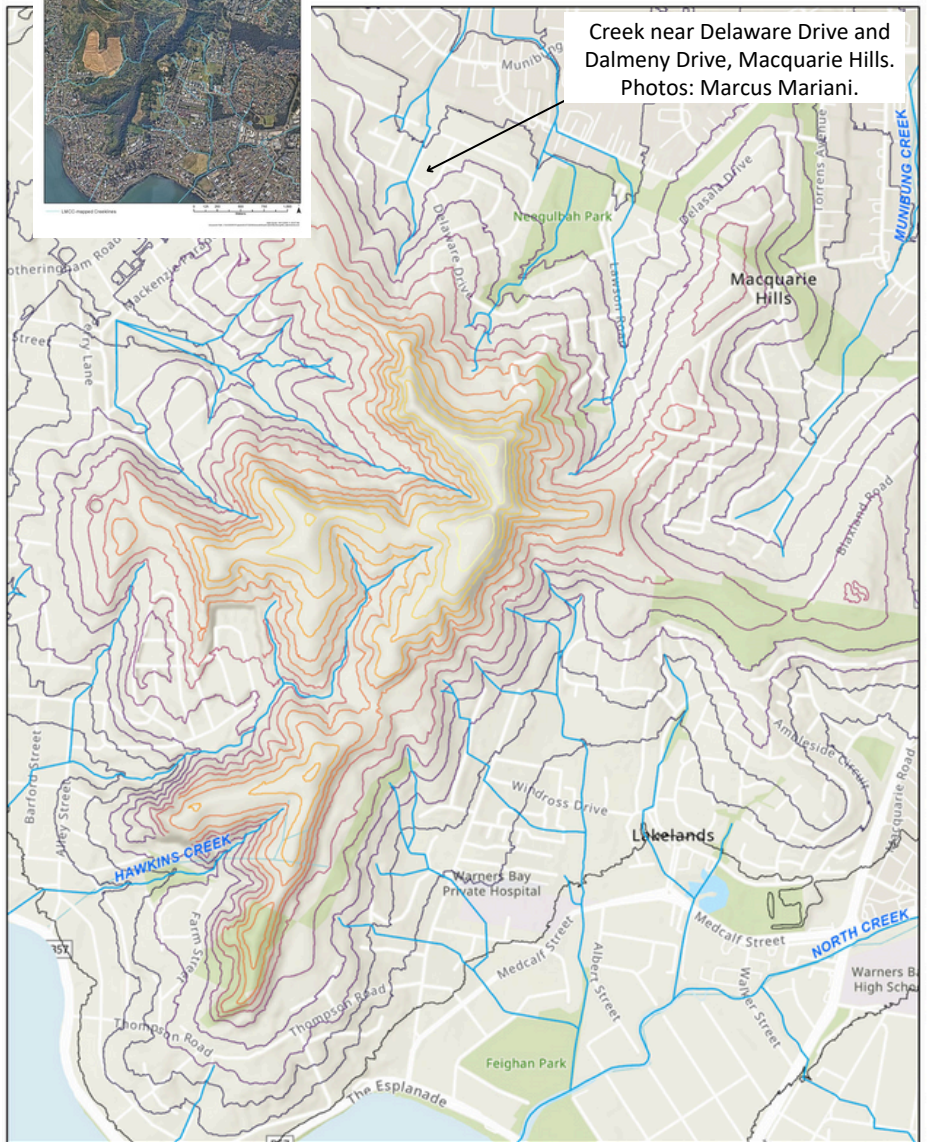


A CURSORY GLANCE- at this creek with-no-name would lead to the conclusion that it is a lifeless valley bed, land-locked between two ridge lines as seen on the contour map below ...

The location might be right, but to say 'lifeless', would be a gross error of judgment.

The truth is very different, and this applies to all creeks whether they are flowing with water after rain (as is the case here) or they are 'dry-as-a-bone'.

Ephemeral, often, since they show themselves on the surface infrequently, but creeks they remain whether in flood or trickling or 'dry'.



Creek near Delaware Drive and Dalmeny Drive, Macquarie Hills.
Photos: Marcus Mariani.

Munibung Hill - 10 metre contours



Dwinderling

Is this the road to extinction?

Trapped within a bushland area surrounded by suburbia, bandicoots have no thoroughfares by which they can escape predators, risking life and limb when attempting to cross roadways, often with tragic results as reported here.



Bandicoot road kill. Yet another precious creature meets a violent end

BY ALL ACCOUNTS Bandicoots numbered in their thousands within the Lake Macquarie LGA. But not today.

They are rarely seen and when they are, it is most often dead - squashed flat on a road or street.

It's not a pretty look.

In the case of the Bandicoots at Munibung Hill, is this going to be their fate in the medium to long term?

Locked inside a landscape surrounded by a sea of houses, there are no corridors for escape from predators such as foxes, feral and roaming domestic cats.

As the 'shifting-baseline-phenomenon' moves further in the direction of human-focused activities, nature is finding it harder to get a look-in.

With hardly any visible sign of a Bandicoot, the collective memory has been eroded, with it most probably accepted that they don't exist.

At the decision-making table, is the Bandicoot considered to be a species of worth in terms of protection? Is the Munibung Hill habitat / home range Bandicoot friendly? MM

Roadkill is costing Australians thousands. Could virtual fencing be the answer?, by [James Tugwell](#), [ABC News](#). 7 June, 2025. In short:

- Wildlife carers say more could be done to decrease wildlife-vehicle collisions in the ACT.
- A trial of virtual fencing in the Eurobodalla recorded a 90 per cent decrease in roadkill incidents.

Sleepy birds, quiet dawns: how noisy, bright city nights disrupt and change birdsong, by Juli Gaviraghi Mussoi and Kristal Cain, [The Conversation](#), August 6, 2025

We all need a good nights sleep, including other species such as birds, who also suffer when their sleep is disrupted, and it shows in their singing.

Birds' vocalisations are extraordinarily diverse. They range from simple calls, like a chicken cluck, to complex mimicry of other sounds, sometimes even human voices.

These vocalisations are important for birds to share information about themselves and their surroundings.

Scientists have confirmed that all animals studied so far need sleep. This ranges from jellyfish and worms to whales and birds.

Many animals spend a large proportion of their lives sleeping, with some, such as bats, being reported to sleep up to 20 hours per day.

But sleep quality is increasingly compromised by urbanisation. With ever-expanding cities, disturbances such as light at night, noise pollution and introduced predators are common even in once remote areas. This means many birds live and sleep in highly disturbed environments.

Birds that experience noise and light pollution sleep less, wake up more often and have less intense sleep. Just like for humans, sleep is important for birds for brain development, memory, learning, motivation, stress levels, cognition and communication.

THE INVASION CONTINUES



The illegal entry onto Munibung Hill continues to be a great concern for all of us who care so much about keeping the Hill safe from inappropriate use.

But this is not shared by the few who see Munibung Hill as a place to be exploited for their own purposes.

The latest episode is what appears to be the same offenders making further inroads into the bush.

Neighbours in Lucilla Ridge tell us it has become more frequent, suspecting that old telecom cable is being pulled from conduit on the north end. Since the telecommunications towers are serviced from the west, the connections on the north east are no longer used.

This doesn't change the fact that the site entered is a designated Lake Macquarie Landcare area that the Lucilla Ridge Landcare group of volunteers is working to protect and regenerate after decades of habitat disturbance and subjected to invasive plant species.

This latest episode has created even more disturbance with trees chainsawed off. The Munibung Hill Management Plan specifically notes that the tracks are for pedestrian access only, with the signage at the entry stating that vehicles are prohibited.

Contact with local North Ward Councillor - August 1, 2025

Hello Brian

I was hoping I wouldn't need to send you more images of damage on Munibung Hill.

A member of our Landcare group found the damage today.

It appears that the 4WD drivers are widening the track further for easier access.

More trees have been damaged in the process. And the two large holes that were in the last lot of photos are still there.

We would appreciate you bringing this to the relevant people at Council and perhaps work can begin more quickly on a gate.

August 1, 2025

Thanks for your email. It looks like they were equipped with a saw. I have sent a request to Council on this matter and I will contact you when I have further information.

Cheers Brian, Cr Brian Adamthwaite, Councillor



Barrier installed by Lake Mac Council across what had been an open access space at the end of Lucilla Ridge, Macquarie Hills. The works have not included a gate to prevent trail or electric-assist mountain bikes entering at the path opening.
Photo: supplied

*We love to go a wandering
along the Munibung tracks,
And when we go, we love to
sing
our knapsacks on our backs,
Vale-ri, va-le-ra
Vale-ri, va-le-ra-a-a-a-a-a
Vale-ri, va-le-ra
Our snackpacks on our backs.*

"The Happy Wanderer" ("Der fröhliche Wanderer" or "Mein Vater war ein Wandersmann") is a popular song. The original text was written by Florenz Friedrich Sigismund [de] (1791–1877).^{[1][2]}
https://en.wikipedia.org/wiki/The_Happy_Wanderer

.. we like the version by [John D Loudermilk](#)

We are all suspended within the world-wide-web of life

'Internet of nature' helps researchers explore the web of life,
by German Centre for Integrative Biodiversity Research (iDiv)
Halle-Jena-Leipzig. Phys.Org, 11 April, 2025
Integrating food webs and information networks. Credit:
Nature Ecology & Evolution (2025).

A novel paper led by Dr. Ulrich Brose of the German Center for Integrative Biodiversity Research (iDiv) and the Friedrich Schiller University Jena is widening the understanding of how species interact within ecosystems via the so-called "Internet of Nature."

Published in *Nature Ecology and Evolution*, the paper reveals that species not only exchange matter and energy but also share vital information that influences behavior, interactions,

and ecosystem dynamics—revealing previously hidden characteristics of natural ecosystems.

Traditionally, ecological studies have concentrated on material interactions, such as feeding, pollination, and seed dispersal. However, this new paper shines a light on the essential role of information exchange between species.

"An understanding of processes in natural ecosystems without considering the flow of information through the Internet of Nature would be similar to trying to understand where and why goods are shipped in human societies without taking the Internet into account," explains first author Uli Brose, head of the Theory in Biodiversity Science research group at iDiv.

‘Precious’ but still to be protected

It’s one thing to utter the words, to write the phrase, ‘one of Lake Macquarie’s most precious landscapes’, as noted in the statement below ...

It’s another thing to underscore what are words of sentiment, until protections are put in place - to give substance to the claims.

When the ‘*beauty of Munibung Hill*’ is protected with the Management Plan made real; and when ‘*the important natural and cultural values*’ get to be profiled in Council publications, only then will Munibung Hill be able to show off her elder status as the iconic landscape she is.

And ‘*safe access for passive recreation*’ will mean families are once again welcome to visit and appreciate what all the hype is about.



With spectacular views and unique cultural values, Munibung Hill is one of Lake Macquarie’s most precious landscapes.

Refresh your memory: *The Munibung Hill Management Plan sets out how we will manage access and use of Munibung Hill over the next decade, to protect important natural and cultural values, and provide safe access for passive recreation.* Check it out [HERE](#)



Mid-rise, courtyard-focused buildings and wide boulevard streetscapes created through a biodiversity sensitive urban design approach. Graphical representation developed by authors in collaboration with M. Baracco, C. Horwill and J. Ware, RMIT School of Architecture and Design, Author provided

Co-Designing with Nature: How Communities Are Becoming Stewards of Urban Biodiversity, by [Ankitha Gattupalli, ArchDaily](#). July 21, 2025

The concrete canyon of Melbourne’s Degraeves Street was once a stark service corridor in functional obscurity. Today, the narrow laneway pulses with life beyond its famous café. Native grasses cascade from carefully positioned planters while small shrubs create cooling microclimates.

Challenging traditional ecological design models, community-led approaches to biodiversity invite a reimagining of how architects, planners, and communities collaborate to develop biodiverse urban futures.

Recent research demonstrates that community engagement in biodiversity initiatives yields measurably superior outcomes. The Institute of Development Studies and Natural England found that “the more the public are involved in designing, planning and implementing biodiverse habitats in the first place, the more likely they are to support long-term delivery” of biodiversity commitments.

The UK’s mandatory Biodiversity Net Gain (BNG) policy, requiring all new developments to deliver a 10% biodiversity improvement, has become a laboratory for understanding community-led environmental stewardship. Implemented in February 2024 for developments of 10 or more homes, with small sites following in April 2024, the policy has revealed that successful biodiversity outcomes depend less on technical expertise and more on genuine community ownership of the process.

The program identifies three critical phases where community engagement transforms biodiversity outcomes: pre-construction design and planning, construction and occupation, and long-term management and monitoring. At the design stage, “integrating local views and knowledge about habitats and nature priorities can help developers” while “community engagement...could be an early chance for housing developers to explain BNG policy, consider different options and build ownership of the habitats that then get enhanced or created”.

Melbourne’s Urban Forest Fund illustrates how cities can create flexible frameworks for community-led biodiversity initiatives. The fund supports new green open spaces, tree planting, biodiversity projects, green roofs and vertical greening, and water-sensitive urban design projects with grant applications assessed by a panel of greening experts and community members.

Similarly, this story **Here’s how to design cities where people and nature can both flourish**, by [Georgia Garrard](#), RMIT University, [Nicholas Williams](#). UoMelbourne and [Sarah Bekessy](#), RMIT University, The Conversation, October 24, 2018 emphasise the need for BSUD - biodiversity-sensitive urban design. They ask:

What needs to change to achieve this vision?

Without careful protection of remaining natural assets, from remnant patches of vegetation to single trees, vegetation in cities can easily suffer “death by 1,000 cuts”.

Planning reform is required to move away from offsetting and remove obstacles to innovation in onsite biodiversity protection and enhancement.

'Enriching the earth': A new way to send off a loved one, by [Rowan Cowley, The Senior](#), July 22 2025

Tui Davidson believes body composting should be legalised as a sustainable alternative to cremation and traditional burials.

The idea of being turned into mulch may be enough to make people's stomachs turn, but Tui Davidson believes the concept is an important step to a sustainable future.

Ms Davidson is an advocate for body composting, a process by which the remains of a loved one can be returned to the earth.

The founder of not-for-profit organisation Earthly Remains wants to see body composting offered as a viable alternative to practices she says are unsustainable and harmful to the environment.



Tui Davidson is the founder of social enterprise Earthly Remains and has been lobbying the ACT government to make body composting available for Canberrans.

ABC Canberra's Emma Bickley spoke to Tui about body composting on Saturday Breakfast. [LISTEN HERE](#)

Tui is also petitioning the NSW government to permit body composting in NSW.

The Genius of Trees by Harriet Rix review – how trees rule the world, [Charlie Gilmour, The Guardian](#). 8 Aug 2025

The story of how the Earth, and human beings, have been shaped more than we know by these forces of nature.

When was the last time you stopped to say thank you to a tree? Perhaps it's something we should do more often. After all, we owe them everything, from the air we breathe to the soil beneath our feet, and far less obvious things too. We have trees to thank for the swirl of our fingerprints, our posture, and possibly even our dreams.

In her new book, British tree science consultant Harriet Rix presents trees as an awesome force of nature, a force that has, over time, "woven the world into a place of great beauty and extraordinary variety". How have trees done this? And can they really be said to possess "genius"?

If you think of life first emerging from the sea, hundreds of millions of years ago, you might picture something like the Tiktaalik, a human-sized floppy-footed fish that hauled itself out of the shallows sometime in the Late Devonian. But the evolutionary eureka moment arguably came long before that, when one lucky green alga washed up on the Cambrian shore and managed to survive the deadly UV light on land. Element by element, trees have learned to control water, air, fire and the ground beneath us.

"Plants learning to survive and use UV light was a thunderbolt," writes Rix. It "allowed a whole new chemistry to emerge, root and branch, in a whole new place: dry land ... Safe from predators, who for the moment were left in the sea behind them, these photosynthesising cells started on a path that led to the amazing complexity of trees."

Munibung Hill Conservation Society

Membership

We value everyone who has signed up to be a member or subscriber.

With the re-launch of **Munibung Musing** magazine we have introduced a new membership structure to better reflect the changing circumstances and to more closely identify with standard membership practices.

We therefore invite existing members to revisit their existing membership status with a view to helping MHCS remain financially viable over the long term.

There is no obligation to make any changes.

Four levels of membership came into effect from June 1, 2025. To make any changes, visit the website ...

<https://www.munibunghill.com/membership-affiliate-application/>

Perhaps you would prefer to remain an Ordinary member, but make an annual one off donation. That's fine and would be greatly appreciated.

- Ordinary member - Free, as is currently the case, all current memberships rolling over.
- Standard member - \$4.00 per month (or equivalent*)
i.e. \$0.92c a week
- Supporting member - \$8.00 per month (or equivalent*)
i.e. \$1.84 a week
- Sustaining member - \$25.00 per month (or equivalent*)
i.e. \$6.25 a week (cup a coffee)

All membership types can be paid as a lump sum i.e. as an annual total amount. Monthly rate x 12.

* In-kind contribution in lieu, such as an active member of a Munibung Hill focused Landcare Group.

All members receive the Society magazine *Munibung Musings*.

There are no additional special benefits from being a paid up financial member. The reward is, the sheer knowledge and satisfaction of knowing you have contributed to the organisation remaining viable and able to carry out its mission over the long term.

The join, change membership type or to donate, please visit: <https://www.munibunghill.com/membership-affiliate-application/>

Neither new nor complicated, check dams help re-hydrate dry creek beds and bring life back to catchments

Peter Andrews coined the name Natural Sequence Farming to describe how nature holds water in the soil to be slowly released back with the soil acting like a giant reservoir. NIDS does the same.

She Used Nature to Transform Dry Stream Beds into Lush Oasis During USGS Study, by [Andy Corbley](#), *Good News Network*, Sep 3, 2025

A SCIENTIST who has studied dryland water systems for over 20 years has found the key to transforming barren desert into verdant oases.

That key is so basic, it hardly even merits being called technology, as it's more or less nature at its natural best.

For the sake of scientists' obsession with acronyms, it's called 'NIDS,' for Natural Infrastructure in Dryland Streams - an assemblage of stones, log jams, or other waterway impediments that cause the flow of a stream or creek to slow.

Once upon a time, a mountaintop crumbled away a bit, and a flood of stones raced down the hillside along the paths of least resistance. These stones lost momentum and lodged themselves in narrow sections of those paths, which became streams and tributaries.

As man gradually altered these natural systems to furnish water for their livestock and agriculture, their ability to sustain the land with water in such hot and dry environments diminished.

For 20 years, the US Geological Survey's Laura Norman has been working in areas of Arizona and New Mexico that see some of the highest temperatures anywhere in the country.

Nevertheless, by employing NIDS, she's watched whole landscapes change. Areas where Norman has worked now sustain year-round wetlands, where canopies of green trees shade running water in the middle of scrub desert.

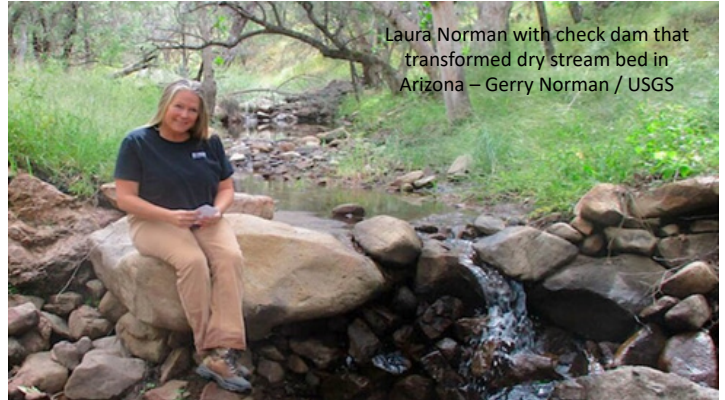
The NIDS structures don't block the passage of water, but merely slow it down.

Slowing the flow decreases erosion and allows the water time to seep into the ground where it can recharge underground reservoirs, or aquifers. In these dark chambers, specialized desert plants reach down to drink. That moisture enters their leaves and evaporates, moistening the air and lowering temperatures below them.

NIDS, whether that's a so-called "check-dam," a bed of stones, or larger cages of stones wrapped in linked chain, trap sediment, improving downstream water quality and creating substrate in which plants can take root. Once in place, the wetland ecosystems that form around NIDS further decrease erosion and support wildlife, the USGS writes.

The results of a 27-year monitoring study were stupendous, with water levels and greenery substantially higher every year in the section that had simple cages of stones dropped into creeks on the landscape.

Neither new nor complicated - just a puzzle piece that land managers, and native tribes either forgot or didn't know they needed.



Laura Norman with check dam that transformed dry stream bed in Arizona – Gerry Norman / USGS

Applying NIDS principles locally

Fergus Hancock, President, MHCS reports ...

IT'S NICE TO SEE modern geomorphological techniques being monitored and evaluated. The best thing about these techniques is their scalability. Long term (20+ years) monitoring and evaluation of rivers in NSW and Victoria demonstrate the benefits of Natural Infrastructure in Dryland Streams (NIDS).

Natural Flood Management (NFM) or Increased Roughness Design (IRD), is a term I introduced to explain the interaction between exposed rock, large wood, sediment structures and vegetation in determining appropriate rehabilitation approaches to different river types in NSW and matching programs in Victoria and recently, Queensland.

Australian rivers being re-assessed include Wollombi Brook in the Hunter Valley, the Orara River on the NSW North Coast, Cann River and Loddon River in Victoria. All show clear signs of increased flood scour resistance, slower peak flow velocities and increased rates of regeneration of channel features such as benches, vegetated bars and concave (sediment trapping) banks on outside bends.

Future re-assessment of the effectiveness of river rehabilitation funding across Australia will include assessing flood scour resistance, changes in peak flow discharge and velocity profiles and sediment trapping effectiveness.

These techniques have developed over the past 50 years but are not well known outside fluvial geomorphological circles and implementing agencies such as Local Land Services and Landcare Australia. Many of the commonly used deep rooted re-vegetation techniques that have increased survival rates of river bank plantings from ~10% to over 50% have come from projects on Wollombi Brook supported by the Hunter Valley Conservation Trust now called Hunter Local Land Services.

Every time you walk Hawkins Creek or other watercourses, have a look for the four types of channel controls and how they work together.

New eyes for waterways

Understanding creeks and stream controls using natural elements helps keep creeks open to the air rather than locked away in pipes and concrete drains. Fergus Hancock expands on the NIDS principles making comparisons with observations at Hawkins Creek at Munibung Hill.

There are four different types of hydraulic controls on streams in SE Australia.

Hawkins Creek is too small to rely on all of them and is badly disturbed below Speers Street, so large wood debris has no influence on stream behaviour.

Rivers (creeks) exert force against different types of controls. Each time a creek uses force against these controls, it uses up some of the energy the channel carries, slowing stream velocity slightly and reducing erosive scour against bed and banks.

These controls can be seen any time we are walking near a river or creek channel. *Keep an eye out for these.*

The first kind of control is rock, particularly bedrock.

Rock forces river flow to change direction or 'jump' over an exposed bedrock bar. Rock controls can occur on the bed of the river or on its banks.

An example is a constructed bed control on the Williams River at Fosterton, built to limit bed incision moving upstream and force a pool upstream. *Photo: Fergus Hancock >*

Bedrock controls are the most common type of controls on upland streams such as Hawkins Creek and other watercourses on Munibung Hill. See how many different types of bedrock controls you can see when you walk along Hawkins Creek upstream of the Farm Rd track entry.



The second type of control is large wood.

In Australian rivers, fallen trees are buried within the bed or bank toes, preventing bed incision points moving upstream and destroying pools and causing banks to collapse.

Unfortunately, most rivers in south-eastern Australia had fallen trees and large wood pieces removed to increase flow velocity.

This led to disastrous river erosion and channel expansion, with pools being undercut or infilled with sediment from upstream eroding sections.

Fortunately, we are learning the value of in-river wood pieces, and these are now forming new bed controls and bank toe revetments in many previously degraded rivers.

An example is the Paterson River near Coulston, where a fallen tree is now a bed sill, forcing a pool upstream and acting as an anchor for vegetation. *Photo: Fergus Hancock >*





THE THIRD form of control is sediment.

Sediment is any material, from micron to many metres in diameter that a river can move during floods. All rivers have sediment features: these are built by hydraulic force pushing and/or lifting sediment and building new river features such as bars, benches, riffles and floodplains.

A good example is Ourimbah Creek, a sand bed river where scour pools, bars and benches formed of sand create habitats for a range of plants and animals. < *Photo left: Fergus Hancock*

Because of its high bed gradient, most sediment is scoured along Hawkins Creek and other watercourses on Munibung Hill but there are many vegetated bars and narrow benches along the creeks.

LASTLY vegetation is an important control on river channels.

Vegetation is the single most important element in functioning, healthy rivers, as its flexibility and strength resists flood scour energy and traps sediment to build important features.

Every creek and river has its own mixture of plant types that reinforce banks and build bars, benches and productive floodplains.

Next time you walk any creek on Munibung Hill, count the different types of vegetation, from emergent reeds and rushes to bank edge shrubs and 'strap' leaved plants to overstorey trees.

An example from the Williams River near Alison shows how vegetation works with other hydraulic controls to resist flood scour and maintain the channel. < *Centre photo: Fergus Hancock*

Engineers and geomorphologists work together to create modified rivers. Creeks are often badly abused in urban areas, used as dumping grounds or are badly scoured because high energy stormwater is sent into them with no protection.

A case example of a modified creek that had been eroded is Waterdragon Creek on Park Rd near Kotara train station.

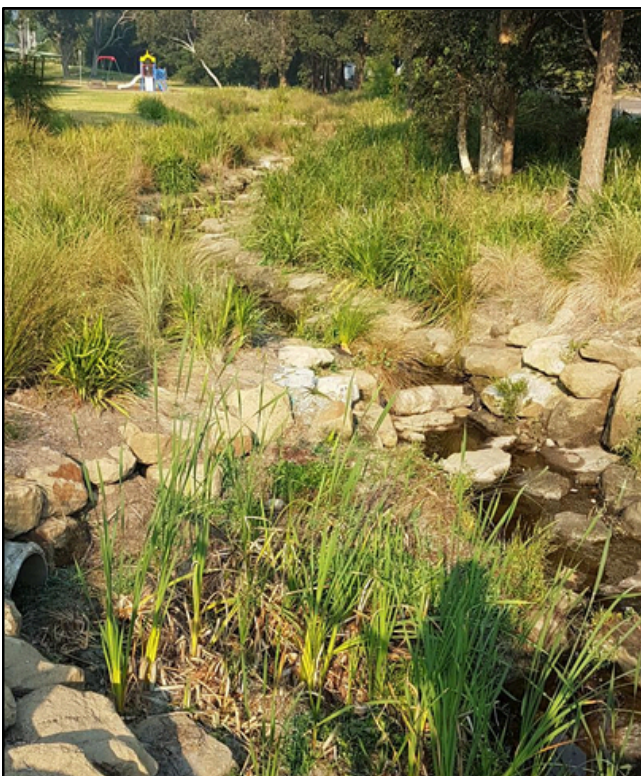
A mixture of controls has been built into the channel to reduce flow energy and protect the stream bed and banks.

Rock is being used because of the number of piped stormwater outlets that add to the scour energy along the creek, while vegetation traps sediment, builds banks and provides new habitat.

Waterdragon Creek post-construction, NSW Soil Conservation Service 2019. < *Photo left: Fergus Hancock*

The vegetated strip has grown and is far denser and more effective than when the channel was rebuilt. This channel will now look after itself, needing very little intervention in future.

So, how many different kinds of hydraulic controls can you see when you walk along creeks on Munibung Hill or other streams in the Lake Macquarie area?



Variety on the verge, is the spice of life



The biodiversity in this verge garden on Longworth Avenue, Cardiff is yet one more example in our series where the single species lawn is gone, and habitat for small animals is given the chance to thrive. Photo: Stuart Carter



Transform your lawn workshop

Sunday 5 October, 10-11:30am

Werona Crescent, Valentine

Reduce mowing and create valuable habitat in your garden for insects, frogs, lizards and birds.

Volunteers from the Valentine Area Sustainable Neighbourhood Group will show you all about no-dig gardening and how to improve your soil.

[Registrations essential.](#)

**Seen a verge garden as you travel around?
We're on the lookout for examples.**

Send an email to:
munibunghcs@gmail.com



Koalas need our help. NOW.
They are under threat from habitat loss and disease. Every sighting matters. There are gaps in our knowledge. Enter information about Koalas you spot at the [I Spy Koala app](#) - location, condition, photos ...



**To change the environment,
change the narrative**

[Mike DiGirolamo, Mongabay](#), 15 July 2025

NARRATIVES HELP shape our society, culture and environment, entrenching beliefs that can help — or harm — our planet and human rights. Tsering Yangzom Lama, story manager at Greenpeace International, joins Mongabay’s podcast to explain how dominant narratives — stories shaped by existing power structures and institutions — often undergird destructive industries and favor the powerful and the wealthy, and to discuss what people can do to counter such narratives.

In this interview, she expands upon thoughts shared in the essay “How to Reject Dominant Narratives,” from the new book *Tools to Save Our Home Planet*, published by Patagonia Books.

“A dominant narrative in reality would be anything that supports the status quo ... what we have right now is a system in which we’re trashing the world in which a small minority is profiting off (sic) of that destruction, and in which the vast majority of humanity does not have the basic necessities for a dignified human existence,” she says.

Countering these narratives, Lama says, requires not only logical appeals full of facts and figures, but also compelling stories that resonate with people’s morals and emotions. “[Shift] the conversation to a completely different space,” she says, “perhaps a space in which you have not just the truth, but the moral authority and the backing of the stakeholders.”

Common dominant narratives that Lama says are harmful include the separation of humans and nature, when, in reality, humans are a part of — and depend upon — nature. Also, the belief that there is a choice between either economic development or a healthy environment.

“I think that is one of the most dangerous fallacies that’s been around us,” she says, pointing to the fact that food insecurity and malnutrition continue to rise globally despite advances in agriculture and continued economic growth.

“I think it’s important [to] present the facts, but also to say [that] there’s a world in which people can have enough to eat, because they preserve nature.”

**The right to roam
belongs to wildlife**

Keep domestic cats contained 24/7

Solar and batteries 101 / Solar Neighbourhoods

Wednesday 15 October, 6-7.30pm

Windale Hub, bilyabayi, 20 Lake Street, Windale

Thinking about solar but not sure where to start? Join for an easy-to-understand session designed to cut through the confusion.

Can't make the date? Sessions are also running in Newcastle, Maitland and online during October. [MORE DETAILS HERE](#)

**Write, photograph, draw, paint
for Munibung Musings magazine**

Everyone has a story to tell. And most people would love to hear what that story is. Especially if that story relates to the themes we carry in MM magazine.

There is an endless range of subjects to write a short story or poem about. If writing’s not your thing then perhaps:

- sketch or draw or paint a landscape scene or a tree or shrubs, or bird, or group walking ... or ...
- photographs while on a walk alone or with friends.

Email to: munibunghcs@gmail.com



Gina Chick - Woman of the Wild

Gina Chick won the inaugural season of *Alone Australia*, surviving 67 days in the Tasmanian wilderness. Gina told Jacqueline Forster why connection with nature and being vulnerable will help us live better on a troubled planet.

Extracts from **Woman of the Wild**, *Organic Gardener* magazine, Issue 158, July 2025.

Q: Can you describe your 'free-range' childhood and what lessons you learned from it?

Every activity involved going outside and engaging with nature and afterwards lying around reading. I feel like I got to understand the rhythms of a wild, free childhood in a way that kids don't experience anymore. My parents taught me self-reliance.

They didn't rescue me, which meant I learned my edges. I learned how to take risks and deal with the consequences.

So I'm very physically comfortable. I'm comfortable climbing trees and falling out of them. I didn't know the difference between me and nature, so I've never had that sense of separation.

Q: You reference First Nations wisdom in your talks. Why is it important to be informed by First Nations knowledge?

When I was out on *Alone*, I feel like I got the tiniest inkling of what Australian First Nations people mean when they talk about connection to Country. I described it as having died and dissolved and been regrown as part of the interconnected web of life.

And when you live like that, where every strand on that web pulls on every other, the understanding is visceral – there is no hierarchy of life.

No life is more important than any other life in nature. And I think any people that have a connection to Country, all of their wisdom, their spirituality, and cultural practices are fostering that understanding.

In the last 12,000 years, we've taken step after step deeper and deeper into disconnection. And now we're so far along as a

culture that we don't even know what we've lost. We have no comprehension of what it's like to be anything other than living in disconnection and look at us.

Q: What does resilience look like for you?

We're coming out of an incredibly stable time and things are collapsing, so I want to be able to offer stepping stones to be in whatever environmental, societal, and geopolitical discomfort we face. I want to create little havens and tools for young people to be able to feel whatever they need to feel, gather their resources, and then organise and take meaningful action for their own lives and for the mess that we've dreamed up for them. To be supple in a storm.

Q: How do we, as urban human, reconnect with nature?

Two words: go outside. If you're inside, connecting with nature is hard because you've got electric lights, comfort and walls. You can't feel the weather or hear the birds. Go outside at night and find the stars, go to the beach and find a horizon, go to a lookout and find perspective.

Find a horizon because there's mystery over the other side and you're a tiny dot in an expanding universe. And then turn your phone off.

Part of the reverence is having respect for the ephemeral nature of Nature.

Making a commitment to give yourself one second of pure presence in nature every day will very quickly turn into a practice that will stitch you into a more nourishing life. It's a great way to relieve anxiety and overwhelm (sic).

In the movement of a beetle across a plant we see our own journey. In the way a dragonfly zooms around we see our own daring thoughts. In the way the most beautiful sunny day suddenly turns to rain we feel our own emotional weather change. We are designed to have ourselves reflected in nature. It doesn't have to be 67 days in the wilderness.

I'm learning about 'humaning' in the wildest sense. And I learned enough to know that it's what I want to do for the rest of my life.

We are the stars, is published by Summit Books Australia.

Gina's mother, Suzanne Chick, is the author of the best-selling memoir, *Searching for Charmaine*, which she wrote some 30 years ago.

I didn't know the difference between me and nature, so I've never had that sense of separation.

No life is more important than any other life in nature. And I think any people that have a connection to Country, all of their wisdom, their spirituality, and cultural practices are fostering that understanding.

Part of the reverence [for nature] is having respect for the ephemeral nature of nature. – Gina Chick

Great example of a less structured playground

Over the course of reporting on the experiences of people visiting Munibung Hill over the last fifty or more years, we have heard how people and parents especially, have valued the ever changing nature of the landscape.

How their children in particular have benefited from 'free-ranging' in the bush - not far from home - wild enough for them to grow-up within an informal setting, that encourages self reliance and good healthy outdoor physical activity.

As if we need to be told that this is good for us, here is the findings of new research that does just that.

And so here's to Munibung Hill being our living example of a less structured play area right in the heart of the city.

Beyond playgrounds: how less structured city spaces can nurture children's creativity and independence, Jose Antonio Lara-Hernandez, Senior Researcher in Architecture, Auckland University of Technology; Gregor H. Mews, Lecturer in Urban Planning, University of the Sunshine Coast (RIGHT), [The Conversation](#), June 27, 2025



Children's play is essential for their cognitive, physical and social development. But in cities, spaces to play are usually separated, often literally fenced off, from the rest of urban life.

In our new study, we compare children's use of such spaces in Auckland, New Zealand, and Venice, Italy. Our findings present a paradox: playgrounds built for safety can stifle creativity and mobility, while self-organising open spaces offer rich opportunities to explore and belong.

In Auckland, places such as Taumata Reserve are a testimony to contemporary playground design – grassy, shaded, equipped with slides and swings, and buffered from traffic. Such places are an oasis cherished by caregivers for the sense of perceived safety they provide.

Yet during our observations, we noted how these spaces function not necessarily as an oasis or a point for social encounter, but rather as isolated refuge islands, disconnected from the city's everyday life. Children's independent mobility and opportunities for diverse play activities remained limited and predefined.

A piazza in Venice

Children in urban spaces in Venice are free to find their own spontaneous activities. Antonio Lara-Hernandez, CC BY-SA

Contrast this with Venice's Santa Croce neighbourhood. Car-free streets and piazzas, such as Campo San Giacomo dell'Orto above, pulsate with life. We saw children play ball, draw on pavements, chase each other and even water plants. These spaces are shared, inter-generational stages.

To compare children's experience, we measured the diversity of activities (a proxy for creativity). Auckland's Taumata Reserve scored just 1.46. In contrast, Venice scored 2.33, with more than 2,600 spontaneous acts in the streets, reflecting a child-led play culture.

Let's build urban futures where children don't just play, but can have positive adventures.

Urban Ecology - explained

Urban Ecology: Theory, Policy And Practice In NSW, Australia - The National Green Infrastructure Network.

The case for change

Australia is one of the most urbanised countries in the world, with more than 75% of the population living in one of 20 major cities. There has been a trend toward living in cities in Australia for more than a century, and it is predicted to continue.

Urban ecosystems and the ecosystem services provided by nature contribute to community health and wellbeing and the economic sustainability of cities, but urbanisation can also cause ecological decline and change.

Terrestrial and aquatic systems are affected by land clearing, the construction of housing and infrastructure, and the way in which cities are managed and maintained.

Urbanisation has resulted in the local extinction of many species and ecological communities, but it has also favoured some adaptive species, which thrive in urban habitats.

<https://www.environment.nsw.gov.au/resources/grants/urban-ecology-theory-policy-practice-nsw-desktop-review.pdf>

Urban ecology strategic action plan, City of Sydney.

30 December 2014

Ecology is the study of relationships between living things – plants, animals, other organisms, and people – and their environment. Urban ecology is specifically focused on cities and the relationship between living organisms in an urban environment.

<https://www.cityofsydney.nsw.gov.au/strategies-action-plans/urban-ecology-strategic-action-plan>

What Is Urban Ecology? | FuseSchool Global Education
<https://www.youtube.com/watch?app=desktop&v=4Hc-pVwSjcy>

Urban Ecology

<https://www.sciencedirect.com/topics/earth-and-planetary-sciences/urban-ecology>

5 ingenious things trees do that human designers can learn from

by Stanislav Roudavski, *The Conversation*. Founder of Deep Design Lab and Senior Lecturer in Digital Architectural Design, The University of Melbourne. August 4, 2025

Tasmania's mountain ash (*Eucalyptus regnans*) is the world's tallest flowering plant. It can grow 100 metres tall and live for more than 600 years.

These trees play a crucial role in their ecosystems, providing habitat and contributing to the overall health of the shared living world. But their numbers are dwindling due to logging, land degradation, fire and climate change.

This sad situation is indicative of a much bigger problem: humans consistently undervalue plants, despite having much to learn from them.

At Deep Design Lab, we design and build homes for wildlife, learning from successful solutions in the natural world. To compensate for the loss of large hollows in large old trees, our team has 3D-printed nest boxes for owls and other species. We have also studied what makes a good tree for birds, to replicate the design.

Our recent research on Tasmania's large old eucalypts has given me another reason to reflect on the many things about trees that urban planners, designers and the public could learn from. Here are the top five.

1. Dead trees and fallen branches

People often cut down dead trees for fear they might fall, causing injury to humans or damage to property. They also tend to remove fallen logs and branches, to tidy up.

But dead trees provide vital habitat for wildlife. Microbes, insects, lizards, birds and mammals often prefer dead trees to live ones. That's because dead wood is easier to digest and dead branches devoid of leaves are easier to land on, or view the surroundings from.

Exposure to diverse ecosystems also supports human health and wellbeing. So it's much better to retain dead trees and design spaces to keep them safely in place, whether standing or fallen.

2. Old Trees

Mature trees have many features younger trees don't. These include hollows, cracks, peeling bark and large quantities of fruit, nectar and seeds.

Canopies of such trees have many more of the horizontal and dead branches that birds prefer to use.

More than 300 species of Australian native mammals, birds, reptiles and amphibians use tree hollows. But suitable hollows take time to form – often hundreds of years.

3. Roots

4. Bark Streamers

5. Litter

Plants as designers

Humans tend to value forms of intelligence that resemble their own brain-based cognition and discount other forms of problem-solving and innovation.

The capacity of trees to construct supportive habitats for themselves and other organisms requires further research. Ecosystems are dynamic and complex, so our knowledge is far from complete.

Get the [full expanded story here](#).

New Aussie invention set to halt spread of invasive predators

Some of Australia's rarest and cutest animals will be allowed to pass through into a sanctuary, but cats and foxes will be stopped. [Michael Dahlstrom](#), *Yahoo News*, 5 May 2025. Full story [HERE](#)



Ugly but useful bats help to keep insect populations down. (Supplied: Bob Bullen)

Breaking 'pretty privilege' is a huge challenge

Ecologist working with the less adorable species such as spiders and bats, are struggling to get our attention due to pretty privilege bias.

Madigan Landry, *ABC News*, 25 June 2025 reports ...

While cute species such as Koalas and Wombats draw public attention - and rightfully so - it takes public support away for equally 'adorable' endangered animals, a phenomenon known as 'conservation bias.'

University of WA research fellow Jeremy Wilson, who studies spiders, says favouritism is leaving some species in danger of extinction. "There's a sort of bias towards studying those groups that we already know a lot about, which are all cute and fluffy things."

Ecologist Bob Bullen, who studies bats, says: "The issue with bats is that people just don't see them, they operate at night, and people don't know they're there."

The microbats of Munibung Hill fall into this category. We'd like to know more about them, since three microbats are on the threatened species list.

[FULL STORY HERE](#)

Sad find in Aussie garden as Aussie state looks to introduce new pet rules

Feral cats have become Australia's most costly invasive species, with efforts to control their populations exceeding \$18 billion to date. Joe Attanasio, *Yahoo News*, 11 May 2025. Full story [HERE](#)

Retrain - Refrain - Restrain

Retrain our brain to see what we've always seen, but see afresh with new eyes as a result of new knowledge,

Refrain from being caught up in the growth-at-all-costs mantra,

Restrain from contributing to a 'waste-based' consumer society that is driving many species to the brink of extinction in the face of the linear economic order.

Giving the Earth a voice helps correct an imbalance tipped in favour of a human-centric legal system

How the nature of environmental law is changing in defense of the planet and the climate, by Dana Zartner, Professor of International Studies, University of San Francisco, [The Conversation, July 23, 2025](#)

While the dangerous effects of climate change continue to worsen, legal efforts to address a range of environmental issues are also on the rise.

Headlines across the globe tout many of these legal actions: South Korea's Climate Law violates Rights of Future Generations; Ukraine is Ground Zero in Battle for Ecocide Law; Paris wants to grant the River Seine Legal Personhood; and Montana Court rules children have the Right to a Healthy Environment, to name a few recent examples.

As an environmental lawyer, I see that most of these suits use one of five legal strategies that have been developed over the past couple of decades. These approaches vary in terms of who is filing the lawsuit, against whom, and whether the underlying legal perspective is based on protecting human rights or the rights of the environment itself. But they all share an innovative approach to protect all life on this planet.

1. Right to a healthy environment

In 2022, the [United Nations](#) declared that humans have "the right to a clean, healthy and sustainable environment ... essential to protecting human life, well-being and dignity."

2. The rights of future generations

A legal concept called "intergenerational equity" is the idea that present generations must "responsibly use and conserve natural resources for the benefit of future generations."

3. Government responsibility

Another human-centered approach is the public trust doctrine, which establishes "that certain natural and cultural resources are preserved for public use" and that governments have a responsibility to protect them for everyone's benefit.

4. Rights of nature

The rights of nature is one of the fastest-growing environmental legal strategies of the past decade. Since Ecuador recognized the rights of Pachamama, the Quechua name for Mother Earth, in its Constitution in 2008, more than 500 laws on the rights of nature have been enacted around the world.

The principle recognizes the legal rights of natural entities, such as rivers, mountains, ecosystems or even something as specific as wild rice. The laws that grant these rights don't focus on humans but rather nature itself, often including language that the natural entity has the right to "exist and persist."

5. Defining a new crime: Ecocide

In 2024, the governments of Vanuatu, Fiji and Samoa formally proposed that the international community recognize a new crime under international law. Called "ecocide," the principle takes a nature-focused approach and includes any unlawful act committed with "the knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment."

Put another way, what genocide is to humans, ecocide is to nature. It is being proposed as an addition to the 2002 [Rome Statute](#), which created the International Criminal Court to prosecute war crimes, genocide and crimes against humanity.

EARTH JURISPRUDENCE/ EARTH LAW



A PHILOSOPHY OF
LAW AND WAY OF
LIVING THAT
VALUES THE
WELFARE OF THE
WHOLE OF NATURE
ABOVE THE
WELFARE OF HER
SUBJECTS



Can citizen juries put the people back in democracy?

[ABC Radio National, Big Ideas](#), 10 Jul 2025

Australia faces many big challenges, but is our democracy up to the job of solving these, or are we experiencing a decision deadlock?

One process that could help governments meet the moment is known as citizen jury or assembly, where a cross section of ordinary people deliberate together over a thorny policy issue, then provide advice.

How do these work? Are they effective? Should they play a more central role in Australia's democracy? The session, 'The Place for Citizens Assemblies in Australia — where do they best fit?' was recorded at a Policy without Politics conference, hosted by Citizen Assemblies for South Australia, Woodville Town Hall, Adelaide. 14 June 2025. Duration: 1 hour - Listen at the highlighted link above. ABC Radio National, Natasha Mitchell

Speakers

Jay Weatherill, Director of Democracy, McKinnon
Former South Australian Premier (2011 to 2018)
Simon Birmingham, Former South Australian Liberal Senator (2007 to 2025)

Emma Fletcher, Co-CEO, Democracy Co
Elizabeth Farrelly (host), Writer, columnist, critic, academic, broadcaster; Former Councillor, City of Sydney
Director, Better Cities Initiative; Author, *Bubberland*; the Dangers of Happiness and Killing Sydney; the fight for a city's soul

Slow looking is your ticket to deeper insights, better writing and quieter skies,

by Julia Baird, ABC News, 6 July 2025

This is why the re-emerging idea of "slow looking" in art galleries and museums is such a wonderful one; it encourages intense observation, attention to detail, reverence for art, skepticism about what first glances reveal, appreciation of learning, respect for the subject. It can be done anywhere — and it might even sharpen our instincts to be better able to identify the hand of artificial intelligence.

Presence, patience and willingness

The slow looking movement seems to have quickened its pace in recent years — the Tate employed it for an exhibition on Bonnard (they had a lovely take on how to slow look), as did the UK National Gallery during lockdown, galleries in New York City and our National Gallery too.

The Frederiksberg Museum in Denmark is encouraging slow looking as therapy for young people with poor mental health. The program, called See Listen Talk, is done in collaboration with Roskilde University and is intended to foster social connection and build empathy along with recovery.

Dr Kasper Levin, associate professor of social psychology and aesthetics at Roskilde University, says: "Many mental health conditions are linked to disrupted perceptions of time and space, which affect one's sense of self. Slow looking may help participants restructure these perceptions, fostering a sense of coherence and stability."

[More AT THIS LINK](#)



There are calls for the state government to enforce stricter cat ownership laws as well over half a million strays roam Sydney's streets (9News)

Call for stricter laws as more than half a million stray cats roam Sydney's streets,

by Madison Scott, [Nine News, Jul 4, 2025](#)

There are calls for the state government to enforce stricter cat ownership laws as well over half a million strays roam Sydney's streets, but in the meantime, a small band of feline lovers are hunting the hunters to round them up and find them homes.

The growing population of unowned cats is putting increased pressure on native wildlife, with the number of strays in the city estimated to be 600,000.

Registered charity Clementine Cats is making a grassroots effort to address the issue, focusing on trapping, desexing, and rehoming the animals.

More at the highlighted link above.

Protecting the environment has always made economic sense. Now we have proof,

Nicki Hutley, The Guardian. 17 July 2025

The failures of our environmental protection laws mean we are not only failing nature but also undermining productivity – at a huge cost.

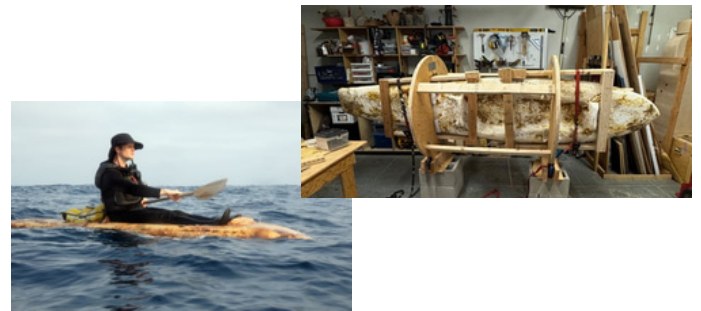
Left to their own devices, humans often make stupid choices. This is, perhaps, most amusingly summed up in the viral public safety video "Dumb Ways to Die" launched by Melbourne Metro more than a decade ago. Far more seriously, human treatment of the environment represents possibly the dumbest choice we have collectively made – and consistently been making for decades.

Economics is about making choices, as Dr Ken Henry, one of Australia's most eminent economists and public servants and now chair of the Australian Nature and Biodiversity Foundation, told the National Press Club in a passionate speech about both the environment and economy: in a world of finite resources, we can't have everything we want.

Yet, as the landmark Dasgupta review into the economics of biodiversity tells us, humanity's demands on nature far exceed its capacity to supply our needs (or perhaps, wants).

Indeed, estimates suggest that we are currently using the earth's available resources at 1.75 times their ability to regenerate. For the U.S., that figure is a shocking 5.4 times, but Australia has the dubious distinction of coming in second place at an estimated 4.5 times.

Read the story [AT THIS LINK](#)



Sam Shoemaker in a kayak made entirely from mushrooms in the waters off Catalina Island. Photograph: Jordan Freeman/Courtesy of Sam Shoemaker

To challenge existing paradigms takes courage and determination

Sam Shoemaker's record-setting voyage shows the promise – and limits – of fungi as a plastic alternative. Lisa Kwon in: **He crossed 26 miles in a kayak made from mushrooms – and lived to tell the tale** (*The Guardian*, Los Angeles, 8 Sep 2025) reports on what started out as an idea most people would think was some 'harebrained' nonsense, to be capable of doing the seemingly impossible - which is so often the story behind true innovation. Full story at this [LINK](#)

Lake Mac Urban Night Sky Project group delivers compelling presentation at Public Lighting Forum

AT A Public Lighting Forum held at the Hilton Sydney, two members of the Munibung Hill Urban Night Sky Project (UNSP) group, based in Lake Macquarie, were keynote speakers.

They attended this Public Lighting Forum at the invitation of Sylvania-Schreder, the international lighting corporation that supplies light fittings to the electrical and lighting industry.

Rachel Thomson, who is a senior lighting designer and member of the Project group is also part of the Illuminating Engineering Society, that promotes dark sky friendly lighting which was one of the subjects discussed at the Forum.

Eddie Bernard and Mark Anderson, from the UNSP group, delivered The Dark Sky Lighting part of the forum program. With implications on lighting practices, the content of these presentations was of particular interest to the event organisers Sylvania-Schreder, who had issued special invitations for them to attend.

Eddie Bernard presented light pollution graphs that highlighted the degradation of the night sky at Munibung Hill over the past 10 years. Information obtained from the Operational Linescan System of the Defense Meteorological Satellite Program (DMSP) indicated an annual increase in light pollution of 5.66% year on year.

“This means that light pollution is doubling every decade,” said Eddie.

At the presentation Eddie also introduced the method of grading how good the night sky using the Bortle Scale of graduated light quality from 1 to 10 and the use of a mobile phone App to measure sky quality.

Eddie said: “When we moved to Macquarie Hills in 1981 next to the nature reserve at Munibung Hill the night sky was great but over the 44 years since then with development and increased urban sprawl the light pollution has worsened to the extent that the Milky way is no longer the splendid sight it once was.”

“Anything that can be done or implemented to educate the community about sensible lighting practices to reduce light pollution will help preserve what we still have at Munibung Hill and surrounds.”

“Lake Mac City Council could take a leading role in working with the community to implement Best Practice Lighting guidelines in their planning procedures to ameliorate the current situation,” he said.

Mark Anderson’s presentation focused on using a 50m Olympic pool in ten steps to gain an appreciation of the relative distances of objects up to the size of the Observable Universe.

Mark also presented a number of dark sky objects and where they are placed in the night sky. He then went on to show how we can evaluate the effect of light pollution on the viability of astrophotography in the city when faced with the existing light pollution scenario.



(From left): Eddie Bernard, Mark Anderson and Rachel Thomson, Urban Night Sky Project group representatives at the Public Lighting Forum, Sydney. Photo: Rachel Thomson

“Reducing the glare from streetlights with light shields, only changes the light levels by 1 percent up to 50 metres away - which is undetectable - so why not shield the lights,” said Mark who finished with a shout out to the Munibung Urban Night Sky Project.

As new technologies emerge, the latest advancements in standalone and hybrid solutions, especially as they relate to solar lighting and smart technology were on the agenda, as was luminaire future-proofing – energy efficiency, smart lighting, Dark Sky, wildlife, and more.

And no forum would be held in this space without there being time set aside to talk about Australian Standards – updates and its impact for new Pedestrian Lighting.

When it comes to exploring the latest developments in Smart Technologies for lighting it is important to ensure that Dark Sky friendly lighting is front and centre for new developments and where there are upgrades taking place.

If you’d like to learn more about the importance of installing dark sky friendly lighting in your neighbourhood, business, school, Council or household, head to the website: <https://www.munibunghill.com/urban-night-sky-project/>



Eddie Berard (left) and Mark Anderson (right) deliver presentations at the Sylvania-Schreder Public Lighting Forum at the Hilton Sydney, 31 July. Photos: Rachel Thomson

PUBLIC LIGHTING FORUM

Exploring latest developments in Smart Technologies, how the introduction of small load metering will impact public lighting, Luminaire future-proofing, Dark Sky lighting, Standards and more...

DATE: THURSDAY, 31ST JULY 2025 9.30AM – 10.00AM WELCOME
TIME: / MORNING TEA
10.00AM – 2.00PM - FORUM
LUNCH & REFRESHMENTS WILL BE SERVED
VENUE
:
HILTON SYDNEY, LEVEL 2 – ROOMS 5 & 6,
488 GEORGE STREET, SYDNEY, NSW 2000

Join us for an insightful day as we explore the latest advancements and innovations shaping the future of public lighting. Key topics include:

Small Load Metering – optimising energy management in public lighting networks. **Solar Lighting & Smart Technology** – the latest advancements in standalone and hybrid solutions.

Integration of Schröder EXEDRA with Existing Control Systems – seamless compatibility with DMX, Pharos, and more.

Luminaire future-proofing – energy efficiency, smart lighting, Dark Sky, wildlife, and more.

Dark Sky Lighting – implications on lighting practices.

Australian Standards – updates & impact of new Pedestrian Lighting -

AS/NZS 1158.4 2024.

Functional & Decorative – the next generation of functional lighting has arrived.

RSVP now to connect with industry leaders.
We look forward to seeing you!

Public Lighting Forum, Hilton Sydney, July 31, 2025

A post on LinkedIn by Rachel Thomson ..

It was a pleasure to attend the Public Lighting Forum hosted by Sylvania-Schröder in Sydney last Thursday.

An even greater pleasure was seeing members of our Munibung Hill Urban Night Sky Project working group, Mark and Eddie, deliver captivating presentations on the art and technicalities of Astrophotography and how light pollution is threatening and disrupting our view of the night sky and what lies beyond.

They are both passionate and knowledgeable speakers, and it is a joy to hear them advocate for issues they hold dear.

A big thank you to the team at Sylvania-Schröder for the opportunity for our group to present at this notable event.

Australasian Dark Sky Alliance

#lightpollution #astrophotography #publiclightingforum #darkskies

Put a lid on it Ensure night light is kept under control and stays within the shield

Look for the light that's out of sight, hidden up inside a protective shield or shade.

Directed light aimed to where it's needed, not letting it spillover, flood lighting the night sky.

Luminaires that follow best practice have a shield or shade opening of 80-90 degrees directing illuminating light down to the ground where it's needed.

That means a shield or shade range of 270-280 degrees for best protection of the night sky from night-light sky glow or night-light eye glare.

The aim is to keep night light under control, not allowing it to shine all over the place, without any defined sense of direction.

LET THERE BE NIGHT by Marnie Ogg, *Australian Geographic*, July-August 2025 was a 7 page feature article that included the SAVE THE NIGHT 'what we can do' explanation - below .. [FULL ARTICLE AT THIS LINK](#)

SAVE THE NIGHT

Marnie Ogg, Australasian Dark Sky Alliance's Director Outreach, explains what we can do to reduce light pollution.



Protecting the night touches every corner of society: climate policy, biodiversity conservation, tourism, public health, energy efficiency and cultural heritage. It requires a shift in thinking. Whether you're a policymaker, planner, homebuilder, teacher, or simply someone who loves the stars – this is your invitation to be part of a national movement.

The truth is, every one of us can make a difference. And unlike with other pollutants, the results are immediate.

Choose warm-coloured, downward-facing lighting for your home and garden. Install timers and motion sensors to ensure lights are only on when needed. Talk to your council about streetlight design. Support dark-sky tourism. Host a star party. Measure night-sky brightness with a smartphone app. Educate your neighbours. Even one bulb, one conversation, one evening of turning out the lights can make a difference.

The solutions exist. The urgency is real. And the night is waiting.



Krystal De Napoli is a Gomeri astrophysicist and science communicator. (Supplied: Kathy Mexted)

Dark skies are a 'library' for Indigenous knowledge systems, but light pollution threatens them,

by Krystal De Napoli for National Science Week, ABC Science. 14 Aug 2024

Dark skies have always been home to me.

I was born to a Gomeri/Kamilaroi woman on rural Bangerang Country in Victoria where sharing star stories and gazing upwards filled the sweetest moments of my childhood.

After losing my mum so unexpectedly when I had just turned 18, astronomy soon became my life's focus.

Aboriginal and Torres Strait Islander peoples have always been keen observers with a legacy of scientific pursuit that spans over 65,000+ years.

Over the millennia, the world has borne witness to the rise and fall of ancient cultures globally. Aboriginal and Torres Strait Islander people have sustained an unwavering presence in Australia throughout this time, maintaining healthy diverse landscapes and bearing witness to extraordinary geological and astrophysical events that persist only in oral record, otherwise being lost to history.

For example, the Luritja community in the Northern Territory describe in specific detail meteorite impacts that created the Henbury crater field 4,200 years ago.

Our night skies may seem somewhat static on the timescales of your lifetime.

Think on your own experiences — you likely find constellations familiar to you from childhood returning to their usual positions in the sky each year as you age.

The Southern Cross is always present in the southern skies however constellations like the human figure of Orion, or faint cluster of stars known as the Seven Sisters, disappear for months at a time over winter.

Audio Duration: 28 minutes

Explore Sky Country with First Nations astronomers Krystal De Napoli and Peter Swanton.

We have been able to trust that every spring they will begin their return.

Their annual positions stay the same, however on the timescale of 65,000 years our night skies have seen remarkable shifts. This is due to the 26,000-year cycle over which the Earth wobbles on its axis and brings new stars into focus.

More at this [LINK](#)

Bogong moths follow the stars home

Coco Veldkamp, Cosmos magazine, June 23, 2025

For people in southern Australia, the Bogong Moth is a familiar friend.

Every spring, some 4 million Bogong moths migrate, sometimes over 1000km, from southern Queensland to the high-altitude regions in the Dividing Range. They can be difficult to spot – with their brown and grey camouflage wings, but they may occasionally ascend on houses, attracted to the light, while making their annual journey south.

New research from *Nature* has, in a world-first discovery, revealed how these humble invertebrates make this vast journey – by combining celestial navigation with Earth's magnetic field to pinpoint a specific destination it has never visited before.

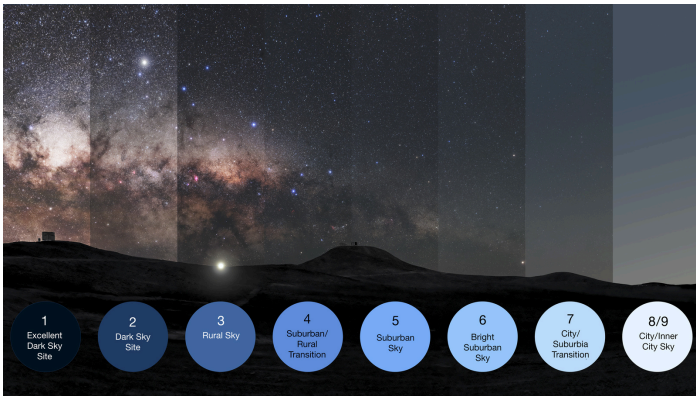
“Until now, we knew that some birds and even humans could use the stars to navigate long distances, but this is the first time that it's been proven in an insect,” says Lund University Professor of Zoology, Eric Warrant.

“Bogong moths are incredibly precise. They use the stars as a compass to guide them over vast distances, adjusting their bearing based on the season and time of night.”

Get more [HERE](#)

URBAN NIGHT SKY CONSERVATION

A night sky conservation project that aims to raise awareness about the impact of artificial light at night (ALAN)



The Bortle dark-sky scale

(usually referred to as simply the Bortle scale) is a nine-level numeric scale that measures the night sky's brightness of a particular location. It quantifies the astronomical observability of celestial objects and the interference caused by light pollution.

Amateur astronomer John E. Bortle created the scale and published it in the February 2001 edition of Sky & Telescope magazine to help skywatchers evaluate the darkness of an observing site, and secondarily, to compare the darkness of observing sites.

Representation of the Bortle scale

The scale ranges from Class 1, the darkest skies available on Earth, through to Class 9, inner-city skies. It gives several criteria for each level beyond naked-eye limiting magnitude (NELM).[1]

The table summarizes Bortle's descriptions of the classes.

For some classes, there can be drastic differences from one class to the next, e.g. Bortle 4 to 5, because the scale's SQM's at lowest are typically the same as the highest for the next, however 4-5 is the only one that deviates from that pattern

https://en.m.wikipedia.org/wiki/Bortle_scale



Jiri Heider, Smart Cities, Lighting, Energy, Customer Relationship, Ausgrid, LinkedIn post re a presentation at the International Public Works (IPWC) Conference, Sydney August 2025

Optimising Urban Lighting: The Safe Use of Adaptive Dimming for Sustainable Cities

<https://ipwc-2025.pasnevents.com.au/days/2025-08-26/abstract/122814>

I had the pleasure of presenting on the power of adaptive dimming and its exciting potential to slash energy consumption while enhancing lighting performance.

The day was packed with thought-provoking conversations, new connections, and a clear signal: Smart Lighting is gaining serious momentum.

With Type 9 metering just around the corner, there's never been a better time to unlock the full value of smart controls—and start seeing real savings 💡💰.

I shared insights from Ausgrid's adaptive dimming trial, and I'm always happy to chat more with anyone curious about the results or looking to explore similar initiatives.

Let's keep the conversation going!



How light pollution impacts our lives and ability to see the stars

Nature and Environment, Part 1: **Light pollution – Bright lights, big, LED cities**, Kathleen Schuster, Living Planet, DW - Dueche Wella, December 6, 2024 [WATCH'N'LISTEN HERE](#) - including transcript.

More and more cities are switching to LEDs to save money and, ultimately, the planet. But ecologists are worried about this trend. Dr. Chris Kyba explains why on a night walk through Cologne, one of Germany's brightest cities.

Part 2: Light pollution – Rewilding the night

In part two, we hear from a team of researchers who want to rewild urban cities. An artist and an ethicist are leading the way with a “light clock,” an intriguing thought experiment on the relationship between light and time. [LISTEN HERE](#)

It might look pretty, but ...

WHAT WE might call a lighting spectacle is really nothing to be proud of.

Take a walking tour of the problem of light pollution in Cologne, Germany, for the “Living Planet” program with journalist Kathleen Schuster. **Bright lights, big city, big light pollution**, DW & The World, March 5, 2025. [LISTEN HERE](#)

Christmas lights burning up the night sky are a seasonal phenomenon, but ecologists have long warned about the everyday issues of light pollution.

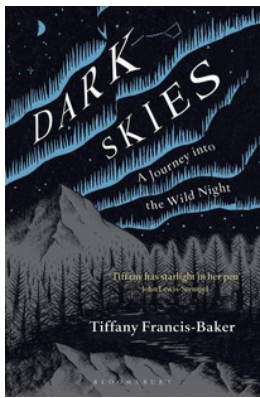
To hear the full story, click on the link above.

ADSA* Approved Lighting

Lanndon Bannister explains how to get **Best Practice Lighting**.

[Click this LINK](#)

*Australasian Dark Sky Alliance



DARK SKIES – A journey into the Wild Night

Tiffany Francis, 2019

Extracts to draw attention to the concerns related to artificial light pollution and its consequences ..

WITH CLIMATE CHANGE, pollution and illegal trophy-hunting making most of the headlines in environmental circles today, protecting the night sky might seem like a low priority on the list of problems to solve. But the truth is that by resolving many of the issues that compromise the darkness of our skies at night, it will lead to benefits for the greater environmental cause. Like most aspects of the ecosystem, the ‘health’ of the night sky is connected with the health of everything else on the planet.

According to studies by the National Optical Astronomy Observatory in Arizona, poorly aimed and unshielded outdoor lights waste more than 17 billion kilowatt-hours of energy every year in the United States alone. The U.S. Department of Energy estimates that 13 percent of home electricity usage goes towards outdoor lighting, and with more than one-third of the light produced being lost to skyglow, this means that residents are spending \$3 billion on wasted light. In the meantime, around 5 million tonnes of carbon dioxide are being released unnecessarily each year by wasted outdoor lighting.

Aside from energy wastage, light pollution affects the habits and behaviours of various species of wildlife. Many nocturnal animals, restrict their movements when the moon is full in order to avoid predators spotting them in the moonlight. This means they tend to hunt more on moonless nights, but as artificial light pollution is spreading further across the habitats of these species, they are spending less time hunting and more time waiting for the light to dim – and as it’s not a natural light with natural rhythms, it never does.

Research has found that many species are susceptible to night blindness. In trying to find ways to reduce deer-vehicle accidents in the United States, local authorities had increased artificial lighting along highways, but studies suggest this actually make it more difficult for nocturnal mammals to avoid collisions with vehicles. Many nocturnal animals use rod cells in their eyes to see in the dark, but when suddenly faced with a rapid change in brightness, they are unable to switch back to normal sight quickly enough and are unable to work out which way to run to escape the vehicle. Their retinas become saturated by the lights and the animals become ‘night blind’, which is what is often called the ‘rabbit-in-the-headlights’ effect. Pages 126-7-8

It’s not only wildlife that suffers when light-pollution levels go unchecked. When we don’t spend enough time in darkness, our bodies don’t make enough melatonin, the hormone that maintains our sleep-wake cycle and helps to regulate the rest of our hormones. Page 129

More than anything, protecting our skies from light pollution is vital for reminding us of our place in the universe. Somewhere along the way, we accidentally became the dominant species on Earth and with this came a sense of superiority over every other living thing we share the planet with. Many of us now believe the Earth is there to serve our human purposes alone, but when we gaze up at the night sky and count every star, every planet lost in space above our heads, we are reminded that we are only one species in the wide universe, and there is still so much we don’t know and have no control over. Page 130-31



This article by Urban Night Sky project group member Stuart Carter was published in **Grass Roots** magazine, August 2025



Artificial light, especially the blue-rich glow of modern LEDs, disrupts delicate circadian rhythms. Image credit: shutterstock

LET THERE BE NIGHT, Australian Geographic, #187

Strings of unshielded outdoor lights like these are a prime example of what not to do. If we can’t self-regulate to stop artificial light at night (ALAN), then it’s only a matter of time before we have yet another set of rules and regulations mandating that such fixtures are contributing to night light pollution and need to be banned. MM

The most impressive impression

IT’S ONE thing to make an impression, but the most impressive impression is one that doesn’t impress itself beyond the boundary of its home turf.

In other words it doesn’t trespass to create night-light sky glow and night-light eye glare.

Moral: Keep lights focused down by using full fixture shielding, using warm white bulbs, using movement activated switchings.

This helps protect the night sky for nocturnal animals who require darkness for essential activities like foraging, breeding, and avoiding predators. Artificial light disrupts these natural behaviors.

BIGGER HISTORY



Big History - A NSW Education Department program

An integrated study of the cosmos, life and humanity, where students use evidence to develop a deeper appreciation of ideas about the world.

<https://education.nsw.gov.au/teaching-and-learning/curriculum/department-approved-courses/big-history>

CIRCULAR ECONOMY AND BEYOND

The changing face of society and how we do business as we transition away from a growth, waste based linear economic model, to a Circular Economy model and beyond to an ecology informed economic model grounded in a Steady State Economic system.

- ... [The Circular Economy Approach - thinking systemically](#)
- ... [Ellen MacArthur - it's time for a circular economy](#)
- ... [Ecological economics and why we need to talk about it](#)
- ... [What is a steady state economy - operating within ecological limits](#)

Of mushrooms and mycelium: How fungi are powering eco-friendly solutions

by Kristine Sabillo, Mongabay, 24 June 2025.

Often hidden from view, fungi are a critical part of our ecosystems. Some can be eaten as mushrooms; others help trees and forests thrive.

But that's not all: they're also helping us create low-cost, sustainable housing materials and additional income for farmers, says Gabriela D'Elia, director of the Fungal Diversity Survey and a fungi enthusiast, in a recent Mongabay video.

"Fungi are showing us new ways to live in allyship with the planet," D'Elia says.

In an episode of Mongabay's video series "Against All Odds," which highlights the latest environment trends and solutions through interviews with experts, D'Elia gives us a breakdown of the different kinds of solutions that fungi offer to humans.

Get the full story [AT THIS LINK](#)



Researchers in Germany are pioneering a sustainable building material by developing mushroom-based insulation boards that promise to reduce environmental impact, capture carbon, and offer a compostable alternative to traditional materials.

[Sustainability Times](#)

This project, known as Mycobuild, is being spearheaded by the Institute for Circular Economy of Bio:Polymers at Hof University of Applied Sciences. By 2026, the goal is to transition from small-scale laboratory production to full industrial manufacturing.

The mushroom-based insulation offers a greener alternative to traditional materials, promising to reduce environmental impact, store carbon dioxide, and utilise less energy during production.



Belmont North Community Recycling Centre opens its doors Rod Thompson, Newcastle Weekly, June 17, 2025

"Another site will make recycling problem waste more accessible and convenient for locals throughout the LGA," Lake Macquarie City Mayor Adam Shultz said.

The new premises at Floraville Road will accept paints, oils, gas bottles, fluoro lights, smoke detectors, batteries and other household waste items free of charge. [LEARN MORE](#)



A great idea to get groceries from shop to car to home all without lifting or using plastic bags. [MORE](#)



Australian Plant Society - Hunter

APS Hunter members are committed to growing, propagating, conserving, appreciating and sharing Australian native plants.

Meetings are held at:
Shortland Wetlands Centre, Shortland
More information: <https://austplants.com.au/Hunter-Valley>
Get in touch:



Lake Macquarie Camera Club



Monthly Club nights, second
Wednesday of each month, 7pm.
Valentine Bowling Club.

More information:

LMCC website

Email:

lakemacquariecameraclub@gmail.com



Lake Mac Repair It

To create a free meeting place where people come together to repair and give a new lease of life to their stuff.

We want to help people connect with their local community, reduce waste, share skills and build friendships.

repaircafelakemac@gmail.com
sustainableneighbourhoods.org.au/repair-it-lake-mac.html

Check the Facebook website for details of where and when.



Hunter Bird Observers Club

Affiliated with BirdLife Australia

www.hboc.org.au

Hunter Bird Observers Club

Meet 7.00pm second Wednesday
of each month (except January)
[Hunter Wetlands Centre](#)
1 Wetlands Place, Shortland

Email: info2@hboc.org.au



Groundswell COLLECTIVE

The **Groundswell Collective**, changemakers with a vision to create a thriving, connected and sustainable community. We work with partners to deliver impactful projects that help to:

- accelerate the transition to renewable energy and net zero
- support the sustainable use of resources and adoption of circular economy principles and practices,
- increase tree cover and promote the planting of indigenous Australian plants.

Contact at:
0498 999 021

info@thegroundswell.org.au



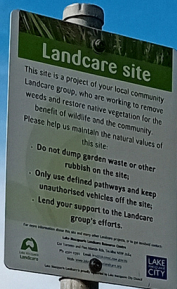
Lake Macquarie Landcare is a partnership between the Lake Macquarie Landcare Volunteer Network Inc, Lake Macquarie City Council and almost

200 Landcare groups, supported through the Landcare and Sustainable Living Centre, umali barai-ku.

80 Toronto Road, Booragul

(02) 4921 0392

lro@lakemac.nsw.gov.au



Lucilla Ridge Landcare

Meet every
2nd Saturday
9.00am for
an hour

Contact:
Heather Carter
0438 288 617
or Heidi Keft
0422 046 094



Biddabah Creek Landcare

Meet every Wednesday
8.30am - 10.00am
Windross Drive, Warners Bay
Wetlands site

Contact:

Vina Chubb 0437 492 387or
Julie Butel 0430 456 212



Friends of Munibung Hill Landcare

Meet every Saturday
8.00am - 11.00am
cul-de-sac Parkstone Close
Speers Point
Contact:
Gavin: 0410 426 433

COMMUNITY

Munibung Hill Conservation Society partners with or shares common goals with many other organisations.



Monthly meetings, first Tuesday of the month at 5:30pm
Valentine Bowling Club,
17A Valentine Crescent, Valentine.
Contact: WarnersBaySNG@gmail.com
Follow on Facebook at: https://www.facebook.com/WBSNG/?locale=sk_SK



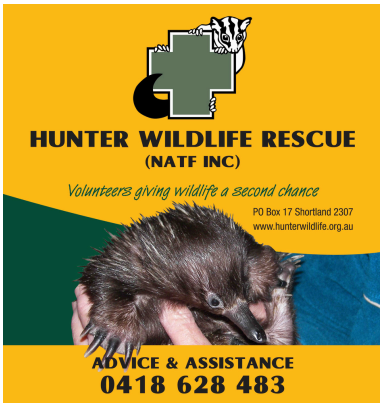
80 Hayden Brook Rd
Woodrising NSW 2284

info@woodrisingchildcare.com.au
Phone: 4950 4212



Monthly Meetings, last Thursday of each month: 6pm to 8pm
Cardiff North Public School, Library, 59 Wansbeck Valley Rd.

Contact us to find out more.
casng2015@gmail.com



Volunteers giving wildlife a second chance

PO Box 17 Shortland 2307
www.hunterwildlife.org.au

ADVICE & ASSISTANCE
0418 628 483

For general information or enquiries contact:

The Secretary
secretary@hunterwildlife.org.au
SHORTLAND



Shed Shop,
99 Beaumont Street, Hamilton
also workshops at
143A Kings Road, New Lambton -
down the Lane off Kings Road.
(near Adamstown railway station)

Open 9.00am - 1.00pm Mon -
Thurs & 9.00am - 12.00pm Friday



The Lighting Society Newcastle

is a branch of the NSW Illuminating Engineering Society chapter.
IES promotes the art and science of lighting with a mission to improve life through quality of light.
Three technical or educational events are held each year for the community and industry, with the aim to promote, inform and celebrate the lighting design discipline.
Monthly meetings are held with the wider NSW chapter.



Newcastle Astronomical Society

University of Newcastle,
Room CT202, Ring Road, Newcastle
Contact: 0425 796 685
E: president@thenas.com.au



AUSTRALASIAN DARK SKY ALLIANCE

Local councils, tourism representatives, health practitioners, ecologists, astronomers and the lighting industry.
Australasian Dark Sky Alliance brings together groups actively working to create artificial light at night awareness.

Visit:
[Australasian Dark Sky Alliance](http://AustralasianDarkSkyAlliance.com)



DarkSky International restores the nighttime environment and protects communities from the harmful effects of light pollution through outreach, advocacy, and conservation.

Visit:
<https://darksky.org/>



EcoAdvocate

is a Lake Mac Council publication providing regular updates on eco-related news and events happening around the Lake Mac LGA.

Email address
ecoadvocate@lakemac.nsw.gov.au



Discover the beauty of the Australian bush with Newcastle Ramblers. Whether you're a family or an individual, there's something for everyone. From scenic day walks to backpacking, cycling, kayaking, or travel adventures - activities cater to all. Curious about upcoming adventures? Check out the Seasonal Program and attend a meeting.

Walking program on website
<https://www.newcastleramblers.org.au/>



The library of things, Newcastle

Open Saturdays 10am to midday
Pacharmama House, 21 Gordon Ave, Hamilton

www.theshareshop.org
www.facebook.com/theshareshopnewy



Supported by
Lake Mac Council
Sustainable

Neighbourhood News
is a monthly roundup of what's going on in the sustainable neighbourhood space

Subscribe at:
admin@sustainableneighbourhoods.org.au



Watagan Wanderers Bushwalking Club runs day walks every week on Wednesday and Saturday in an area including: Newcastle and Lake Macquarie, Port Stephens, the lower Hunter Valley, the Central Coast and Sydney. Also other activities, including abseiling/canyoning, cycling, kayaking/paddling, multi-day pack walks, car-camps, and snow-shoe walks.

Meet on third Thursday of each month, 7:30pm, Landcare and Sustainability Centre, Teralba

To get in touch, send a message:
<https://wwwbc.memberjungle.com/contact-us>

A message from the night sky community...

Would you please do
all you can to get rid
of light pollution
caused by artificial
light at night.

Our nocturnal
residents would
really appreciate it.



THE SOCIETY THANKS JEZWEB
for assistance with management of the Society's:

- Website,
- Munibung Musings Magazine
- Other internet services.

Jezweb specialises in
Website Design, Search Engine
Optimisation, Website Hosting

1300 024 766
E: help@jezweb.au
www.jezweb.com.au

Thanks to
Jeremy Dawes.



Meet at Pavement Society Cafe,
Main Road, Boolaroo,
Sundays 6.00am
rain, hail or shine.

Move at 06:15
Start cnr Fourth/Main Rd,
Boolaroo
All Welcome

Follow on Instagram:
<https://www.instagram.com/bungersrunclub/>

To do:

- Check out organizations like the International Dark Sky Association for more tips
- Turn off lights when you are not using them
- Close blinds at night
- Use warm, dim lights instead of white or blue lights
- Switch to using auto-off security lights
- Push for directional streetlights in your community

<https://kids.frontiersin.org/articles/10.3389/frym.2023.1137068>



**Contemplation,
comprehension, conservation -
a match made at Munibung Hill.**



Munibung Hill Conservation Society
is an advocate for nature, for living on land that has been
occupied for millions of years by species of the fungal, plant
and animal kind, great and small, seen and unseen.