



LAND FOR WILDLIFE

SOUTH EAST QUEENSLAND

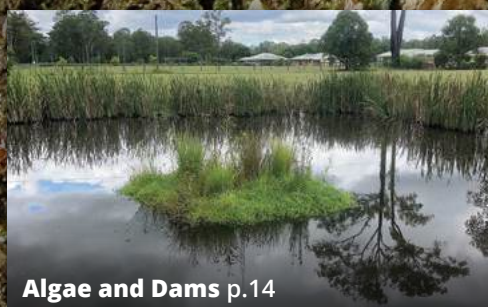
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 December 2024

Land for wildlife

SOUTH EAST QUEENSLAND SNAPSHOT



5,515
 TOTAL
 PROPERTIES



4,570
 REGISTERED
 PROPERTIES



1,145
 PROPERTIES
 working towards
 RESTORATION



87,602^{ha}
 RETAINED HABITAT

10,214^{ha}
 Habitat Under
 RESTORATION



89,576
 iNaturalist
 OBSERVATIONS



16,608
 Facebook Followers

www.inaturalist.org/projects/lfwseq

To join contact your local LfW Officer

Land for Wildlife South East Queensland acknowledges this Country and its Traditional Custodians. We acknowledge and respect the spiritual relationship between Traditional Custodians and this Country, which has inspired language, songs, dances, lore and dreaming stories over many thousands of years. We pay our respects to the Elders, those who have passed into the dreaming; those here today; those of tomorrow. May we continue to peacefully walk together in gratitude, respect and kindness in caring for this Country and one another.

Land for Wildlife is a voluntary conservation program that encourages and assists landholders to provide habitat for wildlife on their properties.

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Back in June I was delighted to present at the International Congress for Conservation Biology (ICCB) in Brisbane. It is the largest global gathering where the latest in conservation research and practices are discussed. Over 1800 people came together to share their stories, challenges and successes. I mention this because I want you, as LfWSEQ members and supporters, to know that the LfWSEQ program, which you have helped create, sits comfortably on the world stage. The number of LfWSEQ members, the program's longevity, the significant ecological outcomes and the fact that it is a stepping-stone to conservation covenants, all warrant its place at an international conference.

I presented preliminary findings from recent spatial analysis about how many Land for Wildlife members decide to enter into conservation covenants, and how long it takes them to make that significant decision. I aim to present the final figures in this newsletter later this year.

ICCB introduced several new terms into my vocabulary, which I thought I would share. For example, 'conservation abandonment' is where people simply walk away from conservation efforts or where governments downgrade or de-gazette protected areas. 'Spillover' refers to the localised impacts of conservation outside of the protected area. In a LfWSEQ context, there could be positive spillovers where neighbours decide to join LfW and start doing conservation.

Two new words to describe feelings that I have felt as an ecologist in the modern world - 'noctalgia' refers to the grief felt over the loss of dark night skies and 'solastalgia' refers to the homesick feeling of seeing ecological change when you are still in your home region. All of these new terms point to the maturing of the conservation sector and how we are creating nuanced words to describe experiences which humans are experiencing for the first time on a global scale.

It is uplifting to see that conservation works are occurring on every continent. From actions to protect habitats for jaguars in the Amazon and tigers in India, to better understanding of the role of scavengers in ecosystems locally (think dingoes and goannas). I valued the talks on advancing gender equity and Indigenous leadership in conservation and the courageous people tackling illicit wildlife trades.

The conservation work we do on our own Land for Wildlife properties may at times feel lonely but always remember that there are countless people globally doing the same thing.

Thank you to everyone who contributed to this edition - be it Peter at Tallebudgera seeking better ways to tag plants to help remember their names (I know I need that in rainforests!) to Fiona and Doug at Burbank sharing their tips on brushmatting. I hope this edition is useful and interesting to all.

As always, I welcome any feedback or contributions.

Deborah Metters
Land for Wildlife Regional Coordinator

We welcome all contributions.

Please send them to:

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Climate & Weather REGIONAL OUTLOOK Aug - Oct 2025



Daytime and Night-time Temperatures.

Above average daytime and night-time temperatures are very likely.



Rainfall. Above average rainfall is likely.



Streamflow. Median streamflows are forecast.

Climate Influences

- El Niño-Southern Oscillation (ENSO) is neutral.
- The Indian Ocean Dipole (IOD) is neutral.
- Australia's sea surface temperatures in June 2025 were the second warmest June on record since observations began in 1900. In SEQ, sea surface temperatures are up to 2°C warmer than average.

Sources

www.bom.gov.au/climate/outlooks/ and www.bom.gov.au/water/ssf/

Weeds to Watch Aug - Oct 2025

Here are some garden climbing vines that have jumped the fence and are now in bushland areas of SEQ.

Horned Melon (*Cucumis metuliferus*) - The large fruit is covered in stout spines and turns from green to orange when ripe, usually in spring. It is full of seed and looks like a cucumber when cut in half.

Bitter Melon (*Momordica charantia*) - The edible fruit is extremely bitter, hence its common name. It is a very vigorous climber.

Both weedy melons have a central rootstock which can be handpulled. Alternatively, leaves can be sprayed with a foliar herbicide.

Top photos by Craig Welden. Bitter Melon fruit by Oskar King and Bitter Melon seeds by angekenedy, iNaturalist.



Seeking Plant

TAGGING SOLUTIONS

Once identified, I like to tag my trees and plants using a plastic tag and permanent marker to show the common and Latin name (as shown in the two photos below). This is how I learn to identify them. Unfortunately, this is not "permanent" and has to be re-written every few months, especially in wet weather.

Perhaps others share my problem and would like a solution or have found one. Could you run an article on "tagging" methods or seek input from members who have successfully solved this problem?

Peter Biddle
Land for Wildlife member
Tallebudgera



EDITORIAL REPLY

Good question Peter! I asked around the LfWSEQ Officer network and there was no definitive answer. Possibly the best example we know of is the one shown here. These are aluminium tags that are hand stamped with a unique number by Land for Wildlife members Kees and Tina Heybroek in Brisbane. They then attach the tags with a nail or with a cable tie depending on the type of plant. Each unique number corresponds to a plant species. They have printed a small booklet that shows all the species listed numerically.

Kees and Tina source the aluminium tags and aluminium nails from Forestry Tools and use numerical stamps to punch in the numbers. You can also buy numbered aluminium tree tags in sets of a hundred from Forestry Tools.

It is a great "permanent" system, but it does require regular updates of the booklet when new species are found. And you have to remember to carry the booklet with you!

Plant tagging system by Kees and Tina showing top image #431 (Richmond Birdwing Vine, *Pararistolochia praevenosa*), #440 (Corky Milk Vine, *Secamone elliptica*) and #140 (Green Kamala, *Mallotus laeoxylodes*).



Permanent Protection

FOR A FUTURE FOREST

A Land for Wildlife property in Purga is the first to sign up to a Voluntary Conservation Covenant with Ipswich City Council.

For both the landholders and council, it is an important leap forward for conservation outcomes in the city, both at a property and landscape scale. One of the great benefits is that it builds on existing strong and positive working relationships between council and landholders with a long-term commitment to conservation outcomes.

It was certainly the case with the Purga property, where the landholders have collaborated with council, Healthy Land & Water and Queensland Trust for Nature on a massive restoration journey.

Landholder Sam said the rural property was overgrazed and barren when they bought it. Spotting a Koala in the thin corridor of remnant forest along the creek “was a game-changer for us”.

The property has great significance on

a regional scale, with Purga Creek vital for Koala and wildlife movement, and the property is adjacent to a federally-recognised Area of Regional Koala Significance (ARKS).

The covenant area of 9.16 hectares includes remnant Endangered Regional Ecosystem 12.3.3 with Queensland Blue Gums (*Eucalyptus tereticornis*) hundreds of years old, as well as an isolated pocket of Gum-topped Box (*Eucalyptus moluccana*). But mostly the covenant covers paddocks in the process of being revegetated.

About 8000 trees and shrubs, 45% of which are Koala fodder species, have been planted to buffer the creek corridor. Long pasture protects this area which is prone to both frost and flood. The landholders are also supporting natural regeneration through wildlife-friendly fencing and rotational grazing.

“The Voluntary Conservation Covenant means we are doing all this work for

wildlife, and we can protect it for the future,” Sam said.

Some key facts about Ipswich’s Voluntary Conservation Covenants

- It is a permanent protection mechanism registered on title through the *Land Titles Act*.
- The agreement area must be greater than 1ha.
- Landholders must intend to protect intact vegetation and/or restore fragmented landscapes.
- A 5-year Property Management Plan guides land management activities.
- Landholders may be eligible for up to \$8000 a year in grant funding and \$2000 bursary, free plants, site visits and access to workshops.

**Article by Jane Pinder
Environment Education and
Communications Officer
Ipswich City Council**



Sam points out a Koala scratching on a Blue Gum.



Part of Sam's property during floods.



Ipswich City Council's Conservation Partnerships Officer, Ko Oishi (left), with Ipswich's first Voluntary Conservation Coventee, Sam.



A Race to the Top

EXPLORING THE COMPETITION BETWEEN VIGOROUS NATIVE VINES AND TREES

Most readers will be aware of the damage that introduced 'canopy-killer' vines such as Madeira vine (*Anredera cordifolia*) and Cats Claw Creeper (*Dolichandra unguis-cati*) can inflict on natural areas. They are perhaps the worst of a growing number of introduced invasive vine species that have become naturalised in south-east Queensland (SEQ). These are the 'transformer' weeds that keep many Land for Wildlife property owners busy on weekends.

But what about native vines? Can native vines become problematic? After all, they can climb up and over trees too. Can they smother and kill trees like their weedy counterparts or are they part of an equilibrium in a finely balanced natural ecosystem?

There are hundreds of species of native vines that occur naturally in South-east Queensland. They fill niches in practically every vegetation community. In rainforest, where access to sunlight is at a premium, vines or 'lianas' are especially well represented. In fact, they are so prominent that botanists label some rainforest communities as 'vine-forests'.

Fortunately, the vast majority of native vines do not pose the threats caused by weedy invasive vines. Native vines perform many important ecological functions. Some species provide nectar, fruit and/or seeds for birds and other fauna. The leaves of many species are the larval food source for butterflies. Some vines fix nitrogen to the soil, while others provide specialised nesting niches for small birds. Native vines are a crucial component of local ecosystems and are integral to the survival of many species of wildlife. Some also compete with trees for resources such as water, nutrients and light as they compete with trees in a race to the top...

Climbing plants have evolved as a result of competition between plants with different growth strategies. Rather than investing energy into growing a strong, carbon-rich woody trunk, vines have adapted and utilise trees as a scaffold to climb and access the sunlight they require for

photosynthesis. Vines have developed xylems that function as super-efficient pumping systems that can transport water quickly and in bulk from their roots to their leaves. This allows vines to grow more rapidly than trees and invest more energy into leaf production rather than the production of wood. Like living solar-panels, some vines spread out across the canopy and forest edges, maximising their surface area in order to capture sunlight and in the process, they deny their supporting trees of this valuable sun-drenched real estate.

However, far from surrendering in this 'battle' with vines, trees have developed their own competitive strategies. Some trees regularly shed their bark, preventing vines from attaching advantageous roots to their trunks, while others regularly drop limbs to release the grasp of tendrils. Species like the Cabbage Tree Palm (*Livistonia australis*) have developed saw-like serrations along the leaf petiole that can thwart the advances of vines by slicing through their young tendrils. These and other palms also regularly shed their leaves, preventing vines from grasping the required rung on the ladder to the top.

Eventually, all trees fall over, this is a natural process that helps drive forest succession. It is sometimes a result of tree senescence (old age) and sometimes from disturbances such as storm damage, flood or fire. These tree-falls create light filled canopy gaps that vines can rapidly colonise. The disturbance resulting from some timber harvesting practices can have a similar but multiplied effect creating a mosaic of canopy gaps throughout a forest. According to successional theory when these forest gaps are created, they are rapidly colonised by pioneer tree species and over time the pioneers give way to slower growing, longer lived tree species that make up the bulk of a mature forest. However, sun loving vines also flourish in these forest gaps and also along forest edges where access to sunlight is more readily available. In some cases, this can hinder tree establishment and stall forest succession.

Due to the incremental clearing of native

This isolated Native Tamarind (*Diploglottis australis*) had been smothered by a tower of native Kangaroo Vine (*Cissus antarctica*). The vines were given a haircut and the canopy of the tree allowed to recover. This was done in conjunction with clearing the lantana around the base of the tree to stimulate the regeneration of native species. Without intervention, this tree would have died.

vegetation, forest edges have become a more common feature in today's landscape. After 200 years of vegetation clearing, the SEQ landscape of today is one of fragmented habitats, where once large tracts of forest have been carved into a patchwork of islands that have a much higher 'edge to core ratio'. Linear infrastructure such as roads, rail, power and pipelines criss-cross the land creating hundreds of kilometres of 'artificial' forest edges. This has created ideal growing conditions for some vines, both introduced and native.

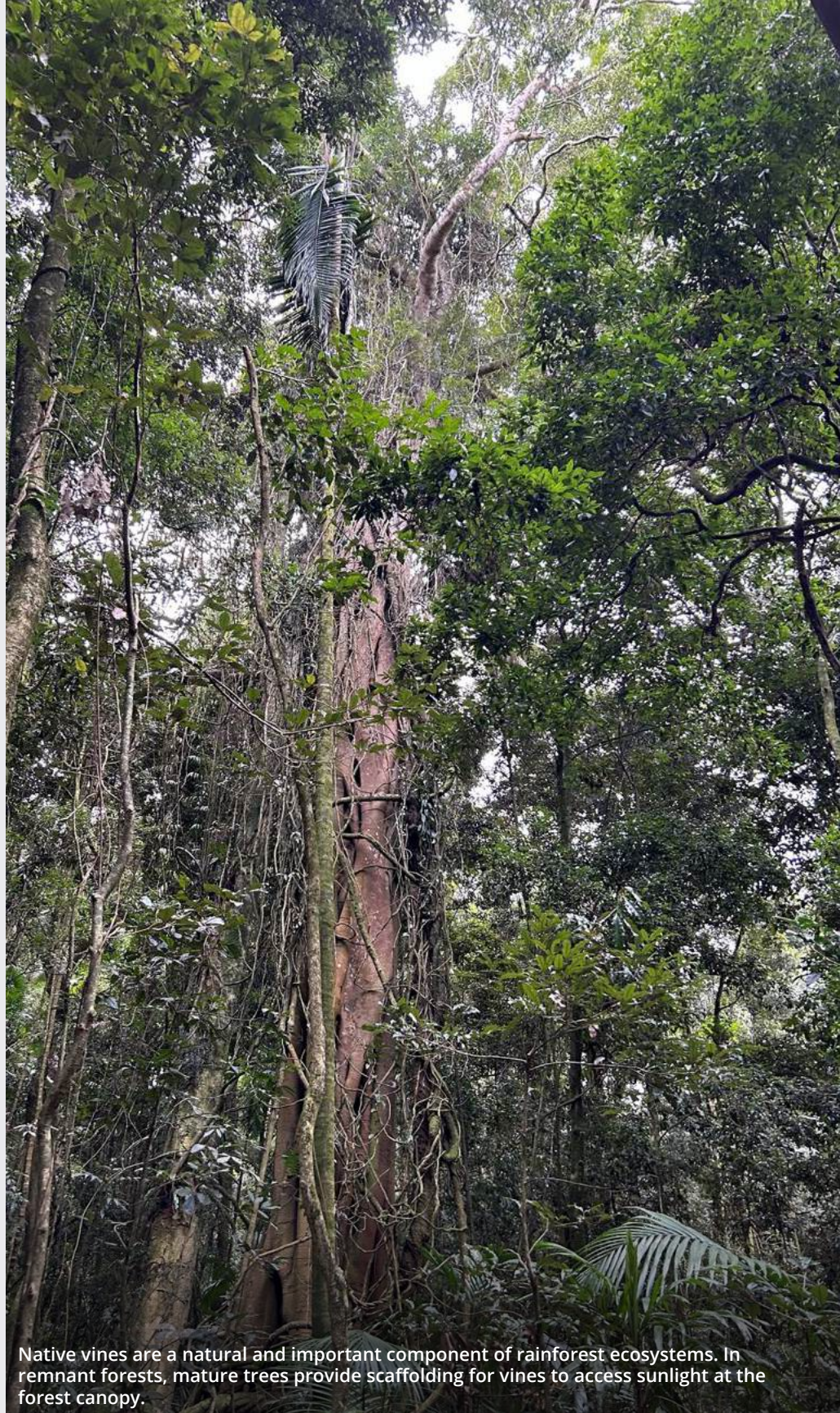
In SEQ, changed fire regimes since European settlement may also be a contributing factor to some vine expansion. When long intervals occur between fire events (planned and/or unplanned) some of the more light loving generalist species of rainforest vines will readily spread and establish in the adjoining open-forest, common examples can include Kangaroo Vine (*Cissus antarctica*) and Giant Water Vine (*C. hypoglauca*). This expansion can occur vegetatively from the rainforest ecotone or via bird facilitated seed dispersal into the adjoining open forests.

While vegetation clearing patterns may be increasing the favourable growing niches available for some vines, there is also a growing body of scientific evidence that such forest disturbances together with increasing global temperatures has tipped the balance further in favour of vines over trees, especially in tropical areas (Ngute et al 2024).

Plants absorb carbon-dioxide through tiny holes in their leaves called stomata. These holes can also lose a lot of moisture through evapotranspiration. Once a temperature threshold is exceeded, trees close their stomata to conserve water but in doing so they cease to photosynthesise, cease absorbing CO₂ and cease growing. The number of hours in each day and the number of days in each year that this occurs has been shown to be increasing. Unlike trees, many vines can continue growing when it's hotter and drier, giving them a distinct competitive advantage in a warming climate. Some researchers have concluded that as global temperatures rise the hotter conditions may be favouring vine growth as trees struggle to photosynthesise during heat extremes. This has significant implications for the capacity of forests to capture and store the levels of carbon required to offset emissions (Van der Heijden et al 2015). It also has the potential to lead to a cascading effect of vine abundance and tree decline.

So, what, if anything can or should you do if you notice native vines smothering native trees on your property?

Vigorous native vines growing up mature trees in remnant forests do not tend to



Native vines are a natural and important component of rainforest ecosystems. In remnant forests, mature trees provide scaffolding for vines to access sunlight at the forest canopy.

pose a problem. However, in regrowth forest, younger trees and saplings are not of a sufficient size or strength to withstand the significant weight of some vines. In this situation young trees will decline in health due to smothering and can be bent over, eventually snapping off branches or even the main trunk. When this happens, it can stall the natural regenerative process and further increase light penetration to the forest floor, favouring the vines as well as other sun loving species such as *Lantana*

camara.

Just as we strategically control weeds to assist the regeneration of native species, sometimes the management of vigorous native vine species is necessary to allow natural regeneration to reach its full potential. Such management interventions should be considered part of the process of assisted natural regeneration. However, a note of caution, this is NOT a case of all vines should be controlled!



These images show native Giant Water Vine (*Cissus hypoglauca*) growing on the edge of regrowth eucalypt forest on the Sunshine Coast (left) and regenerating littoral rainforest in the Redlands (right). On the left you can see Tallowwoods (*Eucalyptus microcorys*) being covered by the vines to the point where a main trunk has been snapped. On the right, you can no longer see the trees underneath the vines, but work has been undertaken nearby to cut three species of native vine to save this mature tree (lower right).

Of the hundreds of species of native vine in SEQ there are only a handful of species that I have observed that fall into this category. Before actively managing any native vines, you should be certain of your species identification, determine the level of threat posed by existing and/or potential smothering and be very clear on your objectives and desired outcomes. Monitor the changes that result from your interventions and adapt management accordingly.

Most native vine species do not grow large enough to negatively impact its host and others such as the near-threatened Richmond Birdwing Vine (*Pararistolochia praevenosa*) that should never be cut back. If you are unsure ask your Land for Wildlife Officer for a property revisit so that you can receive site specific advice. Interventions can be as simple as cutting the stems of the vine at head height so that the foliage dies off and allows the canopy of the smothered trees to recover by shedding the weight and accessing light. This will not kill the vine, rather set it back while the tree recovers. Depending on growth rates, this process may need to be repeated a number of times until the trees are sufficiently established.

Native vines are a diverse and essential component of our regional ecosystems and many species of wildlife rely on them for survival. As many previously cleared and heavily logged rural properties in south-east Queensland revert to forest, we as custodians can play an important role in assisting this regrowth to mature with increased diversity and structure. Occasionally this may require the informed and strategic management of some native vine species.

Article by Nick Clancy
Land for Wildlife Officer
Sunshine Coast Council



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25 Years OF CUSTODIANSHIP

Twenty-five years ago, Kylee Mallinson became a first-time property owner in Barney View, fulfilling a long-held dream of having her own piece of nature to relish in. She was instantly drawn to the natural bushland setting and was eager to learn more about it while helping preserve its unique qualities. After exploring all of the property's 20 hectares including the big hill up the back, she realised it was something special and with good timing, she joined Land for Wildlife. She has made use of the program's many services and resources such as a property management planning workshop, regular newsletters and fact sheets, and getting assistance with plant identification and weed management.

Over the past 20 years, the property has seen some changes, such as the planting of more than 100 trees and the construction of a home, but the local flora and fauna have continued to thrive.

More recently, Scenic Rim Regional Council conducted a flora and fauna survey to help Kylee better understand the incredible biodiversity she's helped preserve on her property. Kylee's property is a beautiful mix of dry sclerophyll ecosystems. The lower areas are dominated by Blue Gum (*Eucalyptus tereticornis*), Gum-topped Box (*Eucalyptus moluccana*), Spotted Gum (*Corymbia citriodora*) and a rich understorey of native shrubs, herbs, grasses and groundcovers, with scattered dry rainforest species.

Further up the slope, the soils are thinner rhyolite and scattered rocks, supporting uncommon canopy species such as Mountain Turpentine (*Syncarpia verecunda*), Helidon Mahogany (*Eucalyptus*

helidonica) and Gum-topped Ironbark (*Eucalyptus dura*).

Kylee's flora list has grown to over 230 native species, including rarities like Fire Pea (*Tephrosia bidwillii*), Mauve Tephrosia (*Tephrosia dietrichiae*) and Red Pea-bush (*Bossiaea rupicola*).

We are grateful for Kylee's commitment to conservation and look forward to continuing this journey together over the next 20 years.

Thanks to Kylee's keen observations and data from two fauna cameras, her property now boasts a record of 11 species of native mammals — including koalas, gliders, Brush-tailed Phascogales, wallabies, and more.

"With so much more to look forward to, spotlighting nights, checking wildlife cameras and rarer species identification, the next 20 years are sure to be just as rewarding," says Kylee.

**Article by Greg Tasney
Land for Wildlife Officer
Scenic Rim Regional Council**

Twenty years ago, former Scenic Rim Regional Council Biodiversity Officer, Keith McCosh, signed up local landholder Kylee to the Land for Wildlife program. A front gate photo was taken to feature in the Council's original Biodiversity Strategy. Fast forward to today — current Biodiversity Officer, Greg Tasney, recently visited Kylee's property and recreated that same photo, marking two decades of dedicated land stewardship.





Happy Soils

HAPPY HORSES

The regeneration of our property has certainly been a labour of love. We are conscious that we live in an environmentally unique and fragile area. There is a lot of encroaching development and destruction of habitat, so we are keen to limit our own impact on our surrounds.

It has been wonderful to have the support of the Brisbane City Council Land for Wildlife team to help us with mass plantings, weed control and information. The Healthy Land, Healthy Horses seminar provided a wealth of information that has really assisted us in making a difference to what was formerly a dust bowl. We have loved seeing the improvements to our property. I think the natural regeneration has surprised us all. We have also observed a wealth of wildlife returning to the property from many species of birds, insects and larger mammals including wallabies, koalas and echidnas.

We have done many different activities to help restore our property. Here is a summary.

EXCLUSION FENCING

Using 3-strand plain wire and electric tape, we fenced off the dam and separately fenced off several corridors along the property boundary and below the dam. We prioritised fencing off the native bushland along our property boundaries that adjoin with neighbouring bushland and an ephemeral creek.

SOIL REGENERATION

On the bare eroded slope above the dam, we laid woody stems and fallen branches from dead wattles and weeds across the ground. This is called brushmatting. This has helped catch leaf litter and slow down overland flow, building up soil and producing excellent natural regeneration of native groundcovers and shrubs.

We applied mulch and old hay over bare dirt areas which the horses use regularly, to protect soil and encourage growth of desirable grass species.

Manure is being spread across bare patches of soil to fertilise the soil. We run the mower over it to help it break down. Old cardboard and manure are used to fertilise bare areas where shrubs and trees are being grown.

Fallen twigs and branches, leaf litter and dead palm fronds have been put to use as groundcover around new plantings in exposed areas. This has definitely helped enhance the growth of our plantings.

REVEGETATION

In 2022, we received Community Conservation Assistance funding from Brisbane City Council for contractors to replant a corridor of trees and shrubs along the south and northern sides to connect existing patches of native vegetation to the creek. We also planted trees and shrubs in a corridor to connect the dam to the creek.

In 2025, even more revegetation was achieved with 500 total plants, some of which were supplied through the Brisbane City Council Land for Wildlife program. Assistance with labour was

generously supplied by Bulimba Creek Catchment Coordinating Committee (B4C) and SEQWater through the Upper Tingalpa Creekcare Project. The plants are now looking amazing.

HORSE MANAGEMENT

To further improve our pastures and soils, we were inspired to implement recommendations from the Healthy Land, Healthy Horses workshop with Stuart Myers from Equiculture in Feb 2023. This was organised by Healthy Land and Water, Brisbane, Logan and Redland Councils.

During the dry of spring 2023, we completely took our horses off the pasture paddocks to allow the grass to rest and recover and to enable weed control. The horses were retained in a hardstand paddock where they were fed hay.

In the hardstand paddock, the corners were fenced off and replanted with flowering trees and shrubs. This prevents the horses from cornering each other and connects habitat for birds and pollinators across the block.

Doug installed a sprinkler system through the pasture and native pasture paddocks to keep grass watered in times of no rainfall.

WEED CONTROL

Doug invested in a wick wiper attachment for the slasher to treat weedy grasses, namely Giant Rat's Tail and Parramatta Grasses (*Sporobolus* species) in the pasture paddocks with flupropanate. Excellent early results have been achieved. Other minor weeds are also being treated with herbicide.

NATURAL REGENERATION

The natural regeneration of native plants has been a highlight, particularly the diverse native grasses and groundcovers. The fact that our property is adjacent to bushland and that the pasture has not been heavily grazed in the past have both helped ensure good seed stock and natural regeneration. We have been delighted to find patches of delicate sundews (*Drosera* sp.), bluebells (*Wahlenbergia* sp.), Goodenias and other wildflowers.

The grazing paddocks have an excellent diversity of native grasses and sedges including Common Fringe-rush (*Fimbristylis dichotoma*), Barbed Wire Grass (*Cymbopogon refractus*), Kangaroo Grass (*Themeda australis*), Brown's Lovegrass (*Eragrostis brownii*), Native/Hairy Panic (*Panicum effusum*), Wiry Panic (*Entolasia stricta*), Shortgrass (*Paspalidium distans*), Cockatoo Grass (*Arundinella nepalensis*) plus Digitaria and Aristida species.

In non-grazing patches, regrowth has included Whiteroot (*Lobelia purpurascens*), Love Flower (*Pseuderanthemum variabile*), Golden Buttons (*Chrysocephalum apiculatum*), various native peas (*Glycine*, *Chorizema* and *Desmodium* species), Riceflower (*Pimelea linifolia*), sundews (*Drosera* species), sedges (*Lomandra*, *Dianella* and *Lepidosperma* species) and Ground Berry (*Acrotriche aggregata*).

**Article and photos by Fiona and Doug
Land for Wildlife members
Burbank, Brisbane**



Managing healthy pasture cover, healthy horses and restoring natural habitat on small acreage properties with poor soils is a fine balancing act. Fiona and Doug from Burbank in Brisbane's east have spent over two decades working persistently to replenish bare soil, replant and assist natural regeneration across their property. They have made great progress while raising a family, four horses, dogs and numerous chickens.

Since joining Land for Wildlife at the height of the millennium drought in 2008, they now have lush green ground cover and expanded areas of regenerating eucalyptus forest. Their property supports a horse arena, chook yard, two dams, several grazing paddocks, native pasture paddocks and a strip of regenerating riparian corridor adjoining a bushland reserve. It has been my privilege to work with Fiona and Doug, and I hope this story provides advice and encouragement to other horse and nature lovers.

Fflur Collier
Land for Wildlife Officer
Brisbane City Council



Exclusion fencing has been effective in keeping stock out of the dam, creek, bushland and areas that are undergoing restoration. The natural regeneration in fenced off areas has been impressive.



Laying old hay, dead palm frond, leaf litter, branches and other vegetation across the ground has helped our plantings and encouraged natural regeneration. This is called brushmatting and is a cheap and effective way to minimise soil erosion, reduce overland water flow and to help start the soil building process.

Freeing Mundi

THE BROWN TREE SNAKE

We have had several sightings of Brown Tree Snakes at the property since we moved in; the first one was the day we moved in. Other encounters have been in the air-conditioner unit and on the verandah – we have kind of got used to seeing them.

When we came across a big and really chilled one on the verandah, we said hello, took a photo and went to bed. Next morning.... we went to water the raised veggie bed – we had only commissioned it that previous week and were very proud that the seedlings, some of which we'd grown were sprouting beautifully, we had mulched it well, fed it and added netting to keep our little treasures safe. To these newbie gardeners it all looked very professional. However, much to our horror, we found our friendly tree snake totally wrapped up and suspended in the netting and looking really pale and unhappy.

We quickly dressed in long pants, boots and gloves and set about trying to get her down. We unwrapped the netting from the garden bed, but it just got worse for the snake. We took snips and worked as close as we dared, holding the snake with a window opening pole. She ended up with a ballerina's tutu and as we let her move a little, she tried to remove it herself on two bricks – this wasn't happening for her. So Carolyn gently held her head down with the pole as Andrew got closer, but the netting was digging right into her skin – we needed help! We called many snake people without luck and then called the wildlife rehab centre in Eumundi; they were super helpful but couldn't take her in as she is venomous, even if only mildly. They connected us with Luke Huntley, a snake catcher in Noosa, who agreed to meet us there. Andrew had managed to gently get her in a bag by this stage.

It's half an hour drive from Kenilworth to Eumundi – the team and Luke welcomed us warmly and thanked us for taking care of her. Luke carefully took hold of her and everyone marvelled at her size – she's nearly 2m. Luke expertly cut the last of the netting off, and then much to our surprise said we should take her home. So we did but kind of hoping Mundi, as she's now known (after her trip to Eumundi), would like it better in the trees than in our cabin. We let her go about 1km away from where we captured her in a densely forested part of our property. We were delighted she looked so healthy as she slithered off.

Later that evening she was back on our verandah – I guess we are living in her space. Welcome home Mundi!

Lessons learned – netting can potentially harm wildlife – we will not use that style of netting again. There are good people around in the Sunshine Coast to help with wildlife encounters. We are so appreciative of the staff at Eumundi Wildlife Rehab Centre and Luke who were all working on a Saturday morning.

We hope this story will remind people to consider the materials they use around their properties and the potential impacts on wildlife.

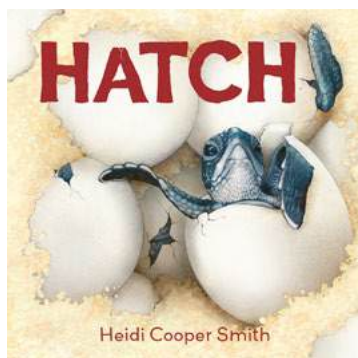
Article and photos by Carolyn and Andrew Bellamy
Land for Wildlife members
Kenilworth, Sunshine Coast



Mundi tangled in garden netting; Luke cutting her free; and finally, Mundi happily released back into the bushland.



These reviews of delightful children's books are by Pippa (aged 10), Flynn (aged 13) and their Dad, Craig Welden. They all live on a Land for Wildlife property in Brisbane and share a love of nature with their Mum and brother. Craig is also a Land for Wildlife Officer with Logan City Council. Together, they've reviewed these books that explore Australian wildlife in fun, educational and beautifully illustrated ways.



Hatch

Written and illustrated by Heidi Cooper Smith

Pippa was especially drawn to the crocodile page—not for the croc, but for the adorable brush turkey chick that stole the show! Hatch explores a wide range of terrestrial, marine, and freshwater animals, focusing on the diverse ways they parent their young. The illustrations are both realistic and irresistibly cute. In Pippa's words, she was "Cutened out!"

The book is well-paced for young readers, with extra information at the end for parents to share and a glossary to help explain tricky terms. Teacher notes are also available on the publisher's website, making it a great resource for classrooms. Pippa gives this book a big thumbs-up and would happily recommend it to her friends.

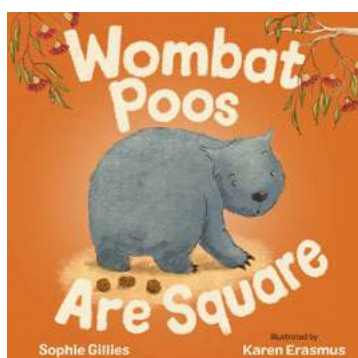


Creature Corridors

Written by Billie Rooney, illustrated by Anke Noack

Creature Corridors takes readers on a journey through the challenges wildlife face when moving across human-altered landscapes. It highlights the importance of safe passageways—like wildlife corridors—and how we can help animals travel safely.

Pippa loved the illustrations and grasped key concepts such as safe road crossings for animals. The final pages provide deeper insights into the importance of corridors for all kinds of creatures, from birds and lizards to farm animals and backyard visitors. Pippa recommends this book to her friends and thinks it's a great way to learn about helping wildlife in everyday spaces.



Wombat Poos are Square

Written by Sophie Gillies, illustrated by Karen Erasmus

This beautifully illustrated book dives into a topic that kids find endlessly fascinating—poo! Pippa found it hilarious and was amazed to learn that koalas can poo more than 100 times a day and that duck poo is squishy and green.

As with other CSIRO children's books, the final pages offer more detailed information and a glossary to help readers and adults understand some of the more complex terms. It's a fun and educational read that turns a giggly subject into a learning opportunity.

Above three books by CSIRO Publishing
25 x 25cm, Hardcover, \$27
Widely available online



Sunny Finds His Song

Written by Cate Storey and Penny Watson, illustrated by Sarah Matsida

Sunny Finds His Song follows the journey of a critically endangered Regent Honeyeater named Sunny, who struggles to find others of his kind in a changing landscape. Flynn thought the illustrations were beautifully detailed and bursting with colour.

"The book started off a bit sad," Flynn said, "but it ended on a happy note when Sunny finally found his song." One of Flynn's favourite parts was the noisy miners, who he found very funny — they added, in his words, some "funniness" to the story.

Flynn also mentioned he wasn't sure about some of the bird names at first, but he enjoyed learning more about them from the information at the back of the book.

Wet Season Books
26 x 26cm, Hardcover, \$27
www.wetseasonbooks.com.au



Algae and Algal Blooms

HOW TO MANAGE THEM ON DAMS

So, you have a lot of algae on your dam, and there has been a lot of media recently about toxic blooms, so you are worried about the consequences, and want to know how to get rid of the algae.

Algal blooms can be unsightly, smelly, and frankly, a little scary. But did you know that they are simply a product of natural processes and occur when these get out of balance.

To begin with, it's not the end of the world. So let's think about why the algae has appeared, because without knowing this, you are very likely going to throw money and energy away and not fix the 'problem'. I say 'problem' because algae is actually not the problem, but a symptom of the problem.

It is important to realise that in a healthy dam, you will always have algae. There are two main types: string algae and planktonic algae and they are both essential to the natural processes in any waterway or waterbody. Unfortunately, sometimes the system gets out of balance, and this can result in algal blooms, bad smells and in extreme cases, the death of aquatic life.

Caution: I would like to add a note about blue-green algae here. These are misnamed as algae and are in fact cyano-bacteria. They can be very toxic to animals and humans. Thankfully, the best treatment is the same as for algae.

Algae typically require three essential conditions for growth, so check your dam for these.

1. Warm water temperatures.
2. High levels of nutrients (eutrophication) – both in the water column and benthic layers (the sludge on the bottom). Phosphorous and nitrogen are common contributors.
3. Direct sunlight in large amounts.

Other influencing factors include high levels of carbon dioxide (anaerobic conditions) and still water, which often creates temperature stratification with a warm upper layer, and it also lowers oxygen levels as the water is not being mixed.

The key to managing algal blooms lies in preventing the combination of these three main conditions for growth. In most cases, you need to:

1. Reduce the water temperature (not that easy to control).
2. Reduce nutrient inflows before they reach the dam (much easier to control).
3. Promote the growth of natural competition for the nutrients in the dam such as plants and good nitrifying bacteria (fairly easy to manage but can be expensive).
4. Increase water circulation and mixing or aeration (fairly easy to control).
5. Reduce the amount of direct sunlight on the water surface (not that easy to control).

It's actually very similar to managing a domestic sewerage system where the focus is on promoting aerobic bacteria that breaks down nutrients (organic matter) without creating nasty smells.

So here are your options:

1. **Install a dam aerator.** This will increase the oxygen levels and promote the growth of good nitrifying bacteria. It will also help to mix the water and stop temperature stratification by reducing the temperature of the surface water.
2. **Plant around your dam.** Plants like sedges, bullrushes and lomandras in the inflow areas will filter out nutrients and also reduce sediment entering your dam. You can use hay bales here too, because hay contains nitrifying bacteria. Tall trees will help shade the water, reducing the amount of direct sunlight received and lowering the water temperature. It's best not to plant large trees on the dam wall as they could impact the structure of the wall. Your Land for Wildlife Officer can assist with selecting plants suitable for your area. You can also have a look at the iNaturalist Guide: Logan Native Plants for Dams. <https://www.inaturalist.org/guides/15391>
3. **Introduce and foster competitive bacteria** such as Nitrosomonas and Nitrobacter to actively compete with the

algae for available nutrition. They use up excess nutrients and break down organic matter without stripping oxygen from the water. There are a number of products available online such as EcoClear, Biostim, Diatomix and The Water Cleanser.

4. **Restrict or remove livestock access to the dam.** Nutrients and sediment from soil trampling and manure will be reduced when off-stream water is provided.
5. **Create floating islands.** These are simple floating vegetation beds that hold nutrient-hungry plants. The beds allow for many more plants than simple waterside plantings, giving significantly more root mass for taking up excess nutrients. They also have the added advantage of providing brilliant dog, fox and cat-free habitat for nesting waterbirds! Instructions can be easily found on the web.
6. **Poisons (algacides)** are not recommended (by us) for treating algal blooms. This method only treats the symptoms of the problem. Mass killing of algae quite often results in increased dead matter which robs the water of oxygen as it breaks down, kills aquatic life and starts the algal process off again.

To be clear, most cases will require more than one of these management approaches in combination to ensure long term success. Which ones will depend on your situation. If the above methods do not work for you, we recommend that you seek professional advice and begin by identifying which type of algae you have.

For a much more detailed understanding of the above, we encourage you to have a look at the following excellent websites.

- Waterqualitysolutions.com.au
- Sustainablefarms.org.au
- Fytogreen.com.au

Plus the Land for Wildlife Technical Note W2 Healthy Dams available at lfwseq.org.au.

Article by Peter Copping (Logan City Council) with assistance from Michael Goode (Redland City Council), Stefan Hattingh (City of Moreton Bay) and Andrew Wills (Brisbane City Council).



Several Local Governments in SEQ run workshops whereby Land for Wildlife members make floating wetlands for dams on their properties. Floating wetlands are a relatively quick and easy way to get more plant root mass working to take up nutrients out of a dam, thereby reducing the risk of algal blooms. Here are photos from floating wetland workshops in Brisbane and Moreton Bay regions, and an installed floating wetland.

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Winter Wattles

There is a stunning show of wattles flowering across SEQ this winter. It would be hard to miss their beautiful yellow and white flowers showing en masse and their sweet perfume.

Australia's official floral emblem is the Golden Wattle (*Acacia pycnantha*) which is well known to have a beautiful floral display. There are over 1000 different species of wattles in Australia and about 68 species in SEQ according to the *Mangroves to Mountains* Field Guide. They are found in all different types of habitats from rainforests through to heathlands.

One of the tallest wattles in SEQ is Marblewood (*Acacia bakeri*), which has been recorded to grow to 30m tall. On a shorter note, the Fan Wattle (*Acacia amblygona*) is a sprawling shrub that is less than 1m high.

Wattles are a pioneer species, plants that are first to grow in disturbed areas. All acacias are nitrogen-fixing plants. Their roots contain bacteria that allow nitrogen to be absorbed from the atmosphere benefiting the plant and the surrounding soil.

The general lifespan of a wattle is between 10-20 years but a few species are long lived such as Blackwood (*Acacia melanoxylon*) which can live to 200 years or more.

Wattles were and continue to be used by indigenous Australians for food (wattle seeds are highly nutritious), utensils, tools (Acacia wood can be termite resistant and strong), weapons, string, dress and medicines.

Article by Maree Manby



Shown here are Lynn and Chris Roberts, Land for Wildlife members in the Redlands, standing in front of a stunning Brisbane or Eprapah Wattle (*Acacia fimbriata*), which is a spectacular flowering plant and a great addition to any Redland garden.



From top: Leichhardt's Wattle (*Acacia leichhardtii*), Baeurlen's Wattle (*Acacia baeuerlenii*), Fan Wattle (*Acacia amblygona*) and Mountain Hickory Wattle (*Acacia penninervis*). Photos by Deborah Metters.