

Gecko Newsletter



Summer 2021 No 87

Blue Mountains City Council Bushcare Program

Acknowledgement of Country

The City of the Blue Mountains is located within the Country of the Dharug and Gundungurra peoples. The Blue Mountains City Council recognises that Dharug and Gundungurra Traditional Owners have a continuous and deep connection to their Country and that this is of great cultural significance to Aboriginal people, both locally and in the region.

Blue Mountains City Council pays respect to Elders past and present while recognising the strength, capacity and resilience of past and present Aboriginal and Torres Strait Islander people in the Blue Mountains region.

We're back!

Following the easing of restrictions and after five long months of COVID 19 lockdown, we are excited to welcome Bushcare volunteers back on site. The health and safety of our community and volunteers is our top priority and with that in mind the following protocols will be in place until the NSW Government announces further changes, which will be when NSW reaches 95% double-dose vaccination. At this stage, they predict this will be around 15 December, but this may change so make sure you check the restrictions regularly.

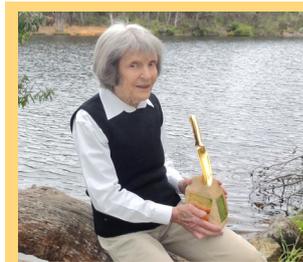
Bushcare activities has resumed under the following protocols:

- Bushcare will resume for fully vaccinated people only (for everyone 16 years and older).
- Check in using the QR code, or sign on the check-in sheet.
- Show your proof of vaccination to the Bushcare Officer (you only need to do this the first time and it is not recorded).

Please remember to social distance, wash and sanitise your hands regularly, only bring morning tea for yourself and don't share, and if you are unwell, even mildly, please stay home.

After NSW reaches 95% double doses, Bushcare will then reassess and come into line with further easing of NSW Government restriction guidelines.

We hope to see you all back soon.



Meet this year's Bushcare legend

Turn to page 2 to read all about the 2021 Bushcare Award recipients, including the new Bushcare legend, Rae Druitt

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Bushcare Awards

Celebrating our volunteers at the annual Bushcare Awards

The Bushcare community has continued to thrive, despite a second disrupted year due to COVID-19 lockdowns, and together we celebrated another wonderful year at the annual Bushcare Awards, held on Saturday 30 October.

Once again, we celebrated through the eyes of the digital world, with the ceremony live-streamed for the whole Bushcare community to enjoy.

Blue Mountains Mayor Mark Greenhill presented the individual and Bushcare Group birthday milestone awards and spoke warmly about the passion, dedication and importance of Bushcare volunteers and the work we do in the Blue Mountains.

Congratulations to Rae Druitt receiving the Bushcare Legend Golden Trowel Trophy and our recipient of the Junior Bushcare Ryan Memorial Shield – Daemon Silk.

And a special thank you to David King, Gundungurra man, for the Welcome to Country and talk. We also heard from John French and Fiona Lumsden showing their recent survey Birds in The Gully, and Megan Halcroft talking about native bees in preparation for pollinators week.

Our 'Thank you' gift to volunteers this year is a cooler lunch bag that will be presented to you by your Bushcare Officer when you all come back together onsite – with the personal touch!



IMAGE: David King, Gundungurra man and Bushcare Legend for the Welcome to Country and Sandy Benson presenting from the Council Chambers.
CREDIT: BMCC

IMAGE: Cooler Lunch Bag

Group awards – celebrating years of service to Bushcare

25 Years

Sublime Point (Wentworth Falls)
Bushcare Group
Mt Riverview
Bushcare Group

20 Years

Mt Riverview
Bushcare Group

15 Years

Glenbrook Lagoon Bushcare
Long Angle Gully (Warrimoo)
Landcare
Valley Heights (Benoit Park)
Bushcare
North Lawson Homeschoolers

5 Years

Bush Place (Glenbrook)
Bushcare
Raymond Street (Blaxland)
Bushcare
Seed Collection Group

Individual Awards



Bushcare Legend
Golden Trowel Trophy –
Rae Druitt



Masters Award
Fiona Lumsden



Hard Yakka Award
Ian Power



Landcare Legend
Viki
Willmott-Sharp



Environmental Warrior
Ryan Kembrey



The Junior Bushcare Memorial Shield
Daemon Silk

Turtle Habitat Island – The Prototype for Inspiration

By Nathan Summers

A community network in the ACT, the Ginninderra Catchment Group, have taken a great interest in the Turtle Habitat Island at Glenbrook Lagoon, a structure designed for Turtles to lay eggs in a place that is free from predation.

The group focus on Mulligans Flat and Goorooyaroo Nature Reserves, which are 1,600ha of regenerating Grassy Box Woodlands on the northern outskirts of Canberra and the ACT border. In May this year the Ginninderra Catchment Group met with the Glenbrook Lagoon Bushcare group to see the Turtle Island and to learn more about how the project worked.

They have been working closely with Dr Ricky Spencer and his team from Western Sydney University (WSU), and upon further discussions and feedback, have decided to adopt the Glenbrook Lagoon model to establish Turtle Habitat Islands on their own site.

Predation (mainly from foxes) of turtle eggs is a major issue influencing population depletion, many turtles sighted now are often older adults. Nearly 95% of turtle eggs laid do not reach maturity – most succumb to fox predation. The Turtle Habitat Island is designed to alleviate this, and has also proven a draw card for the local community that stop to see what is nesting. Mulligans Flat and Goorooyaroo Reserves have undergone a fox and feral elimination program with once extinct wildlife being re-introduced. The Eastern Quoll and Eastern Bettong introductions are already underway, which is very exciting as both have been extinct on the mainland for some years, surviving only in Tasmania.

More information is available at: ginninderralandcare.org.au/friends-of-mulligans-flat



IMAGE: Our Turtle Island experts Nathan Summers (in the background) and Geoffrey Smith with Dr Ricky Spencer at the Turtle Island Launch in 2020

Acknowledgments for this project go out to the Glenbrook Lagoon Bushcare Group, community volunteers, Salesforce and also BMCC staff who provided the on ground work with the project, as well as Dr Ricky Spencer of WSU for his interest and providing expertise, and to the Department of Premiers and Cabinet for provide the funds which were the impetus for this project to happen.

FrogFind – Volunteer callout!

By An update on FrogFind Projects and exciting new opportunities.

Do you have a passion for the natural environment and years of experience listening to frog calls or are keen to develop those skills? Then the FrogFind Project wants your help.

Last year the University of Newcastle did a call out for citizen scientists to help locate three threatened frog species in the Greater Blue Mountains World Heritage Area (GBMWhA). Some of our Bushcare volunteers eagerly contributed deploying and redeploying audiomoths to capture data, participating in night surveys and providing information on possible frog habitats. Your engagement helped in surveying over 50 sites across the GBMWhA and collecting over 3100 hours of acoustic data – all before the COVID lockdown started.

This hard work has brought success! From the few datasets already checked they have identified two of our three target species, the Northern Heath frog (*Litoria littlejohni*) and the Giant Burrowing frog (*Heleioporus australiacus*), calling from a variety of sites. These findings have allowed the FrogFind Project to help build statistical models that should shed some light on the types of habitats and environmental conditions that encourage reproductive behaviours in these threatened species, which in the long term will shape conservation action plans. **With months and months of acoustic data to get through there is again a call out for community scientists (you!) to assist.**

The FrogFind Zooniverse project will call on community scientists to listen to samples of acoustic data and identify whether target species can be heard calling. If you want to get involved, visit the FrogFind Zooniverse project page at zooniverse.org/projects/ollibruuh/frog-find

For more information contact Oliver Kelly - MPhil, Conservation Biology Research Group, University of Newcastle via oliverk26@hotmail.com



IMAGE: Giant Burrowing Frog (*Heleioporus australiacus*).
CREDIT: Stephen Mahony

Post Fire Monitoring

Post Fire Monitoring by Science for Wildlife

An update from Science for Wildlife

Two years ago, we were already months into the Black Summer bush fires that destroyed millions of hectares across Australia, with NSW being the most heavily impacted. Science for Wildlife have continued their post-fire work that is helping give our koala's a future and how you can get involved by reporting a koala sighting.

Science for Wildlife began their work during the fires, conducting emergency evacuations for koalas from approaching fire, followed by three months of food and water provisions for wildlife that survived the fires and faced dehydration and starvation.

"The longer-term bush fire recovery work we are doing is multifaceted. With support from our core partners San Diego Zoo Wildlife Alliance, and the NSW Koala Strategy, we are working to understand where and why koalas survived after the fires. If we know what koalas need to survive across a burnt landscape, then we can predict what we need to protect," said Dr. Kellie Leigh, Executive Director, Science for Wildlife.



IMAGE: Koala CREDIT: Ian Brown

To collect the data needed, the team at Science for Wildlife have been undertaking surveys of koalas across the fire zones at multiple study sites in the Blue Mountains and adjoining areas. To date they have found some hope, locating bush fire survivors which is good news as it means not all local koalas were lost. The varied fire intensity is the main source of that hope. In areas that were either unburnt or had a low intensity burn that did not reach the tree canopy, more koalas survived. There are indications that the rate of recovery of vegetation, and the moisture levels in the vegetation, are key drivers of where koalas survived after the fires.

"We are still working out just how many koalas were lost. We need to monitor them longer-term to see if there are enough koalas for the populations to grow again, or if there are too few and the populations are likely to decline without further intervention," Dr Kellie said.

The research team are also radio-tracking the koalas that were released back into the wild, three months after rescuing them from the approaching fires. Those koalas, along with others the team have since found, are providing more detail on how koalas use the landscape after fire. There appears to be an increase in the distance the koalas move to find food trees, compared to before the fires. That is a source of concern as koalas have a fine energetic balance where they must balance out the energy they spend digesting eucalypt leaves (which are toxic to most other species), and travelling to find food, against the calories and moisture they can get from the leaves. If there is a drop in the amount of energy they gain, compared to what they spend, then it could potentially result in poorer nutrition and body condition, more susceptibility to disease, and a drop in breeding rates. *"We hope this is not the case, but we're watching carefully,"* said Dr. Kellie Leigh.

While the news is not all cheerful, the fact we still have some koalas left to monitor is a positive outcome and a constant source of hope. They are proving more resilient than expected.

Science for Wildlife post regular project updates as well as maps that show how koalas are tracking after the fires. You can find project updates here scienceforwildlife.org/projects and koala habitat maps here: scienceforwildlife.org/koalahabitatmaps

You can help too. If you ever hear or see a koala, make a report at: scienceforwildlife.org/how-to-help/join-our-koala-project



IMAGES: Camera trap pictures of Echidna, Wombat and Ringtail Possum Credit: Science for Wildlife

In another year of COVID lockdowns and restrictions, Science for Wildlife didn't slow down but was able to continue to scale up their work, doing what they do best, using new techniques and innovation to help provide Australian wildlife with a future under climate change.

With support from the Landcare Led Bushfire Recovery Grant, Science for Wildlife have been able to commence three exciting new projects; an information sharing system called Wildlife Near Me, a new project focussed on conserving critical weight range mammals, and Koala Audio Surveys also known as Backstreet Bellows.

Wildlife Near Me: launching in 2022, will be a one-stop-shop for local communities to access information and opportunities to participate in wildlife and habitat conservation, from citizen science projects to volunteering and habitat restoration actions in the local area, along with maps of priority areas for different species. The app will also provide communities with critical information to ensure future emergency responses for wildlife are safe and effective for both people and animals.

Bushfire Recovery – Small Mammals: since October, 165 camera traps were deployed across the Greater Blue Mountains region to assess the status of surviving wildlife. Australia has a lot of small sized animals (35g – 5.5kg in weight), which are easy prey for invasive predators like feral cats and foxes. This project is being undertaken with the World Wildlife Fund and the University of Sydney to map species composition and diversity across fire intensities to build a better understanding of the impact of the fires on these species.

Backstreet Bellows: in partnership with Department of Industries, the koala audio survey project began in October across two sites, first in the Lower Blue Mountains followed by Lithgow to the Megalong Valley. People living in these areas were asked to register to have a small recording device located on their property for seven days to record male koalas bellowing. This survey will help find and save this threatened species across both public and private land.

You can keep up to date on Science for Wildlife's projects at facebook.com/ScienceForWildlife



IMAGE: Survey crew out in the bushland that is regenerating from fire Credit: Science for Wildlife

Conservation Landscapes

Blue Mountains Conservation Landscapes

By Steven Fleischmann

It's easy to forget that everything below our feet affects what we see above the soil. The Blue Mountains has four distinct conservation landscapes as a result of the regions geology and climate. These areas support unique assemblages of flora, fauna and fungi.

As we move from one landscape to another we can observe changes in floral composition as a result of the changes in the geology of the 'lasagne' of rock layers beneath us. The lower Blue Mountains Shale Sandstone Transition landscape extends from the eastern boundary of the LGA to an area between Springwood and Lawson. Characterised by shallow shales or clays of Wianamatta shale overlying Hawkesbury sandstones on the margins of the Cumberland plain it has, like all other conservation areas, characteristic assemblages of flora species that define it.

There are too many species of the geology to list here, however, two typical vegetation communities of the lower mountain Shale Sandstone Transition Forest (SSTF) are Turpentine/ Ironbark forests and Blue Gum forests.

The understorey of SSTF can be dominated by grasses and ground covers such as *Microlaena stipoides* and *Poa labillarderie* and *P. sieberiana*, *Themeda australis*, *Eragrostis brownii* and *Entolasia stricta*. The ground layer also contains other forbs, herbs and vines like *Hardenbergia violacea*,

Glycine clandestina, *Pimelia lineifolia*, *Siegesbekia orientalis* and *Dianella*. Like many Australian vegetation communities, most of the biodiversity occurs at this layer and can be stunning in spring when the wildflowers are out.

The mid layer, while often open, can become closed and hard to penetrate after fire, is often comprised of species like *Persoonia levis*, *Ozothamnus diosmifolius*, *Hakea dactyloides* and *H. sericea*.

As you walk or drive through the landscape some larger species to look out for are *Eucalyptus punctata*, *E. deanei*, *Syncarpia glomulifera*, *Acacia paramattensis*, *Angophera costata* and *A. floribunda*.

There are several groups in the lower mountains working on Shale Sandstone Transition Forests: Bellata Park, Bush Place; Darks Common; Cross St; Long Angle; Valley Heights and; Explorers Reserve. Knapsack Reserve, on the eastern escarpment of the LGA, has many spectacular gorges and walks, and it also has some excellent examples of Turpentine Ironbark forests with lovely grassy understorey.

BMCC is undertaking restoration work, in the forms of weed control, erosion and sediment control and revegetation in the following vegetation communities on Shale Sandstone Transition Forests.

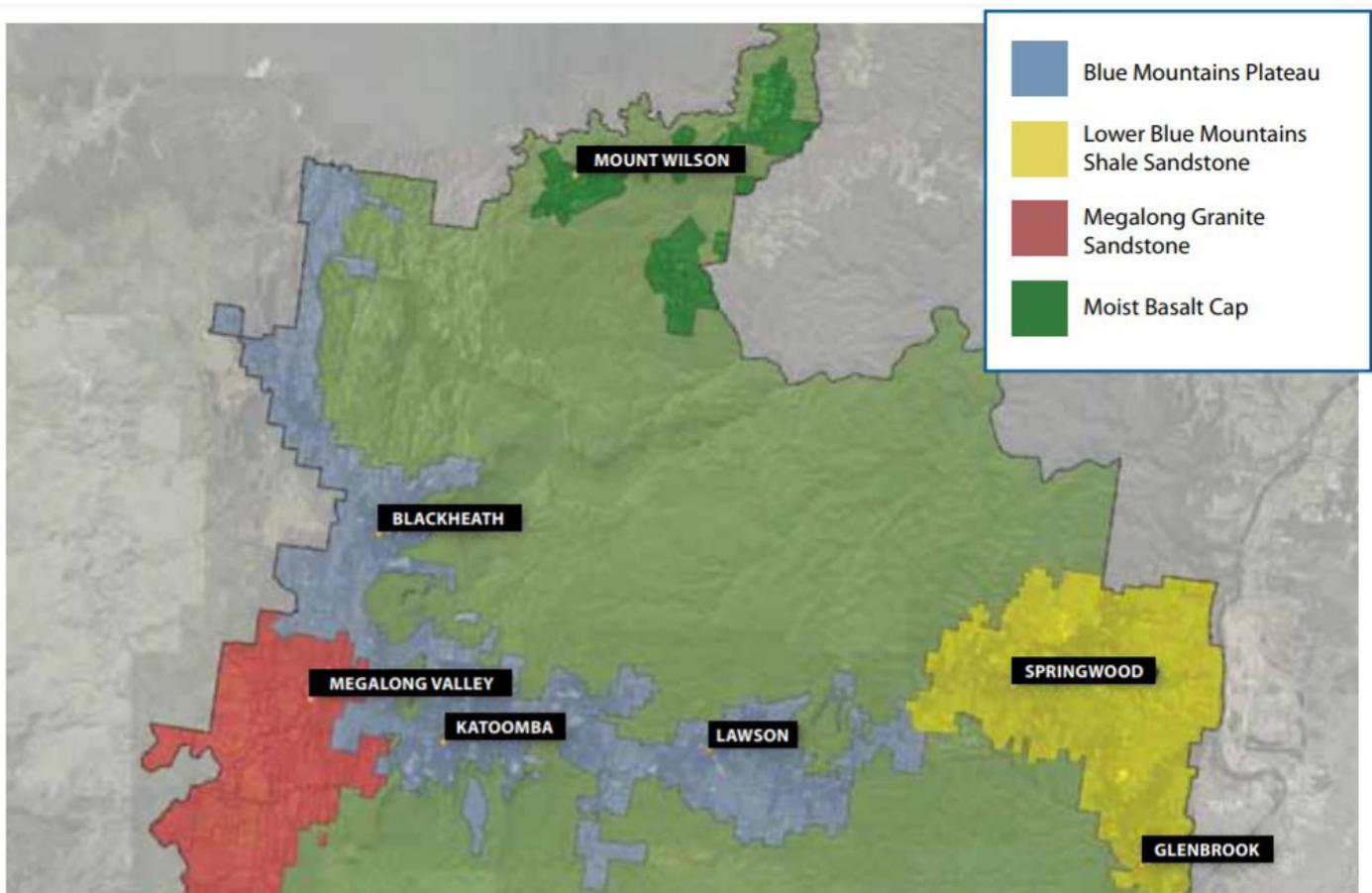


IMAGE: Conservation Landscape Maps excerpt from the Strategic Weed Management Plan 2019 page 33

Eucalyptus punctata (Grey Gum)

By Nathan Summers

The Grey Gum, or *Eucalyptus punctata* is a gum tree of the lower Blue Mountains. The blotched bark patterns of matt grey mixed with pinks and creams make this an attractive bush tree. Growing on deeper sands with a loam influence, the Grey Gum is reasonably common in places such as Faulconbridge, Springwood, Blaxland and Lapstone, and also on some of the ridges in the Megalong Valley. Its range extends from Nowra to Gympie, going inland as far as Mudgee and Kingaroy in Queensland.

Tending to have higher nutrient leaves and sap, the Grey Gum is often a preferred food source for fauna. Koala's often preference Grey Gum leaves if they're available and many possums also like the sap. The large Yellow Bellied Gliders in particular are known to make distinct 'V' shape notches in the trunk to extract the sap.

'Punctatus' is a Latin word for spotted, referring to the oil glands below the leaves that make dark dots. Its coarse tough bark always leaves tell-tale scratch marks



IMAGE: Double scar can be seen around the outside of the fruit as a circular line and on the top of the fruit

from its arboreal visitors, giving this tree the nick name 'The tour guide's friend' among interpretive guides in the mountains. The Aboriginal name in the Sydney languages is 'Mudowe' or 'Mudowie'.

Grey Gums are in a large group of Eucalypts known as *Symphyomyrtus*, which tend to occupy the more fertile soils and are very prominent in our forests, woodlands and mallee areas. Trees in the *Symphyomyrtus* group tend to be preferred by our leaf eating marsupials including Koalas and Greater Gliders. A distinguishing feature of *Symphyomyrtus* trees is a double scar on the gum nut (which are the tree's natural fruit), as they actually have two separate caps on the fruit which drop off at different times.



IMAGE: *Eucalyptus punctata* at Knapsack Reserve with the colours seen in some lighting
CREDIT: Ian Brown

Celebrate! It's our birthday

Next year, we'll be turning 30! It's an exciting milestone and we have great things planned to celebrate with our volunteers.

The Bushcare Program in the Blue Mountains has its origins in 1987 when the early 'Landcare' groups first started. In response to these early community activities, in 1992 BMCC funded a position to coordinate the activities of these groups, and the number of groups quickly and steadily increased.

The Bushcare Team at BMCC currently support over 63 Bushcare and Landcare Groups across the Mountains. We're a small team of dedicated and passionate bushcarers – just like our volunteers. The Bushcare Program also manages events-based programs including Swampcare, Seed Collection and Remote Area Bushcare, and several education and promotion events each year.

We need your help! In the coming months we'll send a call out to our past and present volunteers and Bushcare

Officers to find out what the original challenges you faced at your site, and how that compares to the challenges you now face. We'll also be on the lookout for great old photos of people and sites, to put together a visual history of the amazing Bushcare Program as a way to see and celebrate the achievements we've seen over the last 30 years.

Stay tuned and get searching!



IMAGE: Minnehaha Bushcare Group in the early days when you could take some bricks and a hotplate and cook some lunch for your volunteers.

Farewell Monica

It's a sad time for Bushcare with one of our long-term Officers leaving the team. After 12 years working with the Bushcare Team, Monica Nugent has decided to move on from Council and take up a very exciting opportunity as Senior Field Officer, Bush Regeneration at National Parks and Wildlife Service (NPWS). She will still be part of the Blue Mountains community as she'll be working in Blackheath.

Monica's experience with NPWS and community conservation initiatives will make her as a valued member of their team, just as she has been in ours. We are disappointed to see Monica go, but also very excited for her and we know the challenges and opportunities in this next phase in her career will be very rewarding.

During her time at Council, Monica has made a significant contribution to the Blue Mountains Bushcare Program and in particular with the groups that she has facilitated with such dedication, support and loyalty.

We wish you all the best Monica! We know you'll be wonderful in your new role, and we'll stay in touch.



IMAGE: Monica out on site with volunteers

Welcome Sue



IMAGE: Sue Cunningham and Linda Thomas holding a bush backyards sign that is given to participants of the program.

We are pleased to announce Sue Cunningham has taken on the role of Community Conservation Officer as Linda Thomas is retiring.

Sue's other Council identity is the Team Leader Natural Area Operations in the Natural Areas team a role she will continue part time alongside the Community Conservation Officer role. She brings a range of experience and skills from previous environmental management work in the private Bush Regeneration industry, and through working in a range of roles in the Environment Branch of Council. Sue brings over fourteen years of professional experience in natural resource management including natural area restoration, weed management, environmental community work and education, and water quality research, monitoring and assessment to the position.

This important specialist role in the Environmental Planning team is responsible for engagement with rural and urban private land owners and targeted industry representatives on priority biosecurity and environmental weed related issues, and bushland management. The position also contributes to the development of Council land management policy and strategy, particularly in relation to weed management and community conservation volunteer programs.

We're excited to welcome Sue on board and know she'll be a valuable member of the team and an asset to this important position.

We would love to hear from you and encourage Bushcare volunteers to submit stories for publication in the Gecko. Blue Mountains City Council has the right of final approval of this publication and reserves the right to make editorial changes including but not limited to, style and substance. Although care has been taken in compiling and checking information contained in this publication, Blue Mountains City Council shall not be held responsible or in any way liable for any errors, omissions or inaccuracies.

For more information contact your local Bushcare Officer or email bushcare@bmcc.nsw.gov.au
Or to join Bushcare head to bushcarebluemountains.org.au/join-bushcare



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