

Gecko Newsletter



Winter 2021 No 85

Blue Mountains City Council Bushcare Program

IMAGE CREDIT: Steve Fleishmann

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.

For Dharug and Gundungurra People, Ngurra (Country) takes in everything within the physical, cultural and spiritual landscape – landforms, waters, air, trees, rocks, plants, animals, foods, medicines, minerals, stories and special places. It includes cultural practice, kinship, knowledge, songs, stories and art, as well as spiritual beings, and people: past, present and future.

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.

Saving koalas – Science for Wildlife Project Updates

By Dr Kellie Leigh and Jessie Malpass (Science for Wildlife)

Science for Wildlife, a locally based not-for-profit conservation and research organisation, has been studying koalas in the Blue Mountains for several years. Before the bushfires of 2019/20 they had uncovered an incredible story of several growing koala colonies with high genetic diversity. This bucks the general trend of decline seen in other koala populations, and makes the Greater Blue Mountains region important for conservation of the species.

As the massive bushfires were consuming the Greater Blue Mountains area, Science for Wildlife leapt into action and saved 12 koalas with the help of volunteers and other wildlife experts. These koalas were taken to Taronga Zoo for three months and were then returned once it was safe to do so. In March 2020, Science for Wildlife returned not 12 but 13 koalas to the wild! One of the koalas gave birth to a tiny joey after she was rescued.

It's now been just over 12 months since the 2019/20 bushfires were extinguished, Science for Wildlife has

been working hard to track and assess koalas across the fire zones, including working with volunteers and a very talented canine called Smudge.

They've been monitoring the koalas that were saved ahead of the fires to learn how they use the landscape after fire, as well as heading out to five study sites across the Blue Mountains and the Hawkesbury to conduct scat surveys and find out how many koalas survived, and where.

Since September 2020 they have completed over 200 scat surveys with the help of volunteers, with 250 left to do, using their koala detection dog team including Smudge the Coolie.

Science for Wildlife are calling for volunteers to help identify animals in the [Camera Trap Project](#).



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Giant Dragonfly

Giant Dragonfly sighted by Natural Area Operations team

By Matthew Rudge

Council's Natural Area Operations team are fortunate enough to work across many reserves from Mount Wilson to Lapstone. One of the benefits of this work is they occasionally see some of the rare and endangered species that live within our wonderful Blue Mountains reserves.

After the devastating fires that burnt many swamps in the Greater Blue Mountains World Heritage area, it was a welcome sight to see the Giant Dragonfly in one of the swamps at Wentworth Falls.



IMAGE: Giant dragonfly on boot

CREDIT: BMCC Sue Cunningham

The Giant Dragonfly an ancient peat-swamp survivor in the Blue Mountains

By Dr Ian Baird.

The Giant Dragonfly (*Petalura gigantea*) is a member of an ancient dragonfly family and is listed as endangered in NSW. It has a wingspan of up to 12.5cm and lives in peat swamps, bogs and seepages along the eastern coast and ranges of Australia.

In addition to the large size and widely separated dark eyes, the species is characterised by a long pterostigma (darkened cell) towards the end of the leading edge of the wings, and large, petal-shaped, anal appendages in adult males. Adult females lack the conspicuous anal appendages and are somewhat bulkier than males. These features distinguish it from other very large dragonflies such as *Austrophlebia costalis*.

Uniquely, the larvae excavate and maintain burrows which they occupy throughout their long larval stage (6-10 years). While the species is often referred to as being 'semi-terrestrial', it is in fact a groundwater dependent species which requires access to high quality groundwater within its burrows. Larvae may begin to emerge in early October and extend into January. In the Blue Mountains they normally begin to emerge during November.

Adults live for a maximum of one summer flying season that extends into February, with occasional late flying individuals having been observed as late as mid-March in the Blue Mountains. Adults are predatory on other flying insects during flight and consume a range of prey.

The Petaluridae (petaltails) can be traced back to the late Jurassic and currently includes 11 known species around the world, including the endemic Australian genus *Petalura* with five species.

There has never been a better time to join Bushcare

There are now over 60 Bushcare groups across the Blue Mountains, ranging from Lapstone in the Lower Blue Mountains to Mount Victoria in the Upper Blue Mountains and across to the basalt-topped Mount Wilson. There are a wide range of meeting days and times to suit everyone.

No previous experience is necessary, just enthusiasm! Our Bushcare Officers provide training for all skill levels. If you're interested in joining - bring a hat, drinking water and wear suitable clothing and sturdy shoes.

We are operating with social distancing rules in place.

For more information and to join go to:

bushcarebluemountains.org.au/join-bushcare



IMAGE: Members of Garguree Bushcare group working

Correction: We would like to correct the photo credit to Dr Ian Baird for the *Eulamprus leuraensis* (Blue Mountains Water Skink) provided in the Spring 2020 Gecko Issue.

Should we plant or not?

By Steve Fleischman

As a Bushcare Officer seeing resilience and biodiversity in action is incredibly inspiring.

Over many years, stormwater runoff coming from the Highway, from Hargreaves Street and Valley View Road, Blackheath was causing erosion problems, sediment deposits and a weed problem. The weed problem was so big, it had created an intimidating weed forest well beyond the scope of the Sutton Park Bushcare volunteer group to tackle. Dense thickets of Holly, Privet, Cotoneaster, Radiata Pine, Tutsan, Blackberry and Broom had created an environment where natives could not compete.

The site is strategically important as it is part of the Braeside Catchment and feeds into the Grose River, creating a source point of weeds going into the World Heritage Area.

A problem as complex as this required a multi-faceted approach, and time. Over the past five years contractors have undertaken primary weed control on Tutsan, Holly, Blackberry and Privet. In 2017 a Swampcare group of volunteers formed and undertook erosion and sediment control works, with a bio filter constructed by Council in 2019.

Over the past four years Valley View Swampcare group have undertaken an impressive volume of primary weed control work on a predominantly Holly forest. Radiata Pines had been treated at the same site before I became Bushcare Officer.

A common question when confronted by the initial large impact resulting from primary work is “should we plant

this out?”, and my usual response is “let’s wait and see what comes up”.

Resilience and natural recruitment are answering this question for us.

Growing through piles of Holly timber and mulch, we have counted no less than 20 native species recolonising the site, including:

- Grasses, including *Microlaena*, and *Entolasia*
- Colonisers like Kangaroo Apple, Bracken, *Senecio*, *Polyscias* and a variety of *Acacias*
- Ground covers like *Bidgy Widgy*, and Native *Geranium*
- Other species we have seen coming up are *Gahnia*, *Lomatia*, *Lomandra*, *Leptospermum*, *Billadiera* and *Pittosporum*
- And super excitingly two different types of fungi, *Saprophytes* living on dead wood and *Mycorrhizal* growing in soil

This reinforces for me the importance of regularly walking a site to look at work you are doing to see what processes are occurring.

The presence of native fungus on dead treated Holly and the forest floor is indicative of biodiversity improvements and decomposition, as they help break down dead wood and live in association with plant roots, making nutrients available for native flora.

Process observations are important as they assist with decision making, and in this case, answer the question “should we plant or not?”.



IMAGE: Forest of dead Holly with naturally recruited native understorey CREDIT: BMCC

Regenerating Native Ground Layer

Regenerating a native ground layer from Wandering Trad at Bellata Park Bushcare

By James Bevan, Liz Dent and Rod Hughes

METHOD

Twenty-three years of ecological restoration work has been carried out by Bellata Park Bushcare (Glenbrook) in the gully which contains the rare and protected Sandstone Shale Transition Forest home to the powerful owl. This work has gradually reduced the abundance of many priority weeds, restoring habitat for many native species.

Most priority weed species are at low to very low abundance, and require minimal maintenance. Wandering Trad (Trad), a local priority weed in the Blue Mountains LGA under the *Biosecurity Act 2015*, remains abundant across the site. Trad spreads downstream from the Bushcare site, then into Tunnel Gully and eventually the Nepean River. Controlling the Trad further down the catchment can only be achieved if it's removed at its source.

Bellata Park Bushcare are continuing to work on removing the Trad and promote native ground cover regeneration.

Raking, spraying and hand weeding

Bellata Park Bushcare follows a repeated process of raking, spraying and hand weeding along the highest contours at the top of the catchment. Each work session, the site is assessed and one or a combination of raking, spraying or hand weeding is undertaken along the highest contours. The following example demonstrates three typical consecutive work sessions.

Work Session 1: rake Trad along highest contours into rows and if not raining, spray raked Trad with Starane.

Work Session 2: if it rained the previous month, then spray row with Starane. Meticulously hand weed raked zone.

Work Session 3: hand weed raked zones until Trad no longer appears. Once no Trad is apparent, then rake/spray a new patch along the highest contours (at top of the catchment).

Monitoring

Photo points have been placed at selected places across the site to record the native regeneration.

Photo Point 1



Before October 2020: Trad, Ehrharta.



After February 2021: Sigesbeckia, Commelina & Oplismenus.

PRELIMINARY RESULTS

Monitoring results at Photo Point 1 (above) illustrate encouraging recent results following the process of raking, spraying and follow up hand-weeding.

The 'before' photo (above) taken in October 2020 before the Trad treatment shows a near monoculture of Trad with some Ehrharta. The 'after' photo taken in February 2021 following the Trad treatment, shows the native species Sigesbeckia, Oplismenus and Commelina have regenerated.

These native species are found across the site, and Bellata Park Bushcare is looking forward to slowly regenerating these and other native species over the months and years ahead. If Trad can be eradicated from the source at the

top of the catchment it could be removed from the remainder of the catchment.

The Bellata Park Bushcare Group meets on the first Saturday of the month at the end of Bellata Court, Glenbrook from 1.30-4.30pm. No experience is necessary and the Council Bushcare Officer will provide all training, tools and equipment. If you would like to join the ongoing methodical work of the group, you would be welcome.

Information on the group and contact details can be found on the website here:

<https://www.bushcarebluemountains.org.au/groups/bellata-park/>

Congratulations Lis Bastian!

Congratulations to Lis Bastian, who won the Environmental Citizen of the year Award. For years, Lis has devoted herself to helping others live more sustainably. She does this by leading by example and teaching people of all ages about permaculture and environmental responsibility.

Lis created The Big Fix (thebigfixblackheath.org) which is a social enterprise that focuses on 'changing the story.' This initiative has enabled a collaborative, solutions-based culture to grow and thrive in the Blue Mountains and beyond.

Other projects Lis has spearheaded include a Community Farm in Blackheath, which she regularly reports on through Facebook to inspire others. As part of the Community Farm, Lis has established the Blackheath Community Farm Landcare Group to improve the natural areas around the edible gardens. Lis also set up and now runs 'Pluriversity', which provides a range of learning opportunities for young people who have left school to engage with one another and the wider community.



Lis reaches out to others and builds partnerships with unlimited generosity and devotion to protecting the environment.

IMAGE: Lis Bastian
CREDIT: Coco Elder

Native Plant Propagation Workshop

By Tracy Abbas

The Seed Collection Group, as part of the Bushcare program, has been working with local native plant nurseries over the past three years in various projects including plant rescues and seed collection with Blue Mountains Wildplant Rescue as well as propagation activities at Greening Australia in Richmond (before the closure of their excellent production nursery). These projects aim to promote local native plants, provide our respective volunteers with additional training, and opportunities to learn new skills with like-minded people who may not be wanting to work in the conventional Bushcare model.

On 9 March 2021, Bushcare held our first joint Native Plant Propagation Workshop with Blue Mountains Wildplant Rescue at their nursery in Katoomba. This is our third workshop in collaboration with Richard Johnstone as our main presenter, the other two focused on seed collection, guidelines and protocols.

Richard has over 30 years' experience in native plants and previously worked at Mt Annan Botanic Gardens as their main Seed Collector. Richard's depth of experience and love of plants is infectious and he left no question unanswered. We covered many subjects to do with plant propagation combined with numerous demonstrations of techniques, shortcuts and tips.

We hope to run two alternate workshops per year on seed collection and plant propagation.

If you are interested in attending one of these workshops, email tabbas@bmcc.nsw.gov.au and nominate which workshop interests you. We aim to do the workshops in March and November each year on the second Tuesday of the month, from 10.30am to 3pm.



IMAGE: Native Plant Propagation workshop held in March
CREDIT: BMCC

How did our environment fare last year?

Australia's Environmental 2020 Report found improved rainfall conditions have pulled our environment out of its worst state on record, but recovery is slow, partial and precarious.

[Download the Report](#)



Welcome: New Postings

Connecting Kids to Nature program update

By Emma Kennedy and Gillian Fitzgerald

With COVID restrictions eased in local schools, the Education Team has been back in full swing taking students into local bushland areas to learn and discover. To date this year, we have run field trips with around 400 students from seven schools as part of the program.

In Term 2 we are working with students and teachers from Katoomba High School to design and build a rain garden on the school grounds, which will help reduce impacts of stormwater run-off from the school.

In March, we were delighted to welcome Gillian Fitzgerald to the Education and Engagement Officer position in the Healthy Waterways Team. Gill has worked for the Healthy Waterways Team since 2016 in a number of temporary roles.

Gill brings a diverse range of skills and experience to the position, including a journalism and science background. This is combined with many years' experience developing and delivering environmental education programs to school students across the Blue Mountains through Council's Connecting Kids to Nature Program.

We are pleased to welcome Gill and look forward to her continuing to achieve great results as part of the Healthy Waterways Team.



IMAGE: Year 8 Katoomba High School students studying macroinvertebrates in trays at Wentworth Falls Lake
CREDIT: BMCC

Congratulations to our new Environmental Manager

We are very pleased to announce that following a rigorous and highly competitive process, Matthew Chambers has successfully been appointed to the Environment Manager position.

Matthew has over 30 years' experience in environmental management (including in natural area and threatened species management, tourism infrastructure and emergency management), across both the private and public sectors, and has held the role of Program Leader Environmental Planning (previously Natural Area Management) since 2011.

In the Program Leader role Matthew has led a significant asset management program including the management of 135km of walking tracks and 98 lookouts across the City and delivery of many high profile projects, including the recent Echo Point Gathering Place and Katoomba Falls night-lit walk. Beyond this, Matthew has also made significant contributions to emergency management and most recently to Emergency Operations Coordination and the Incident Management Team during the 2019/20 bushfires.

Matthew brings this significant breadth of experience, knowledge and dedication to the environment of the Blue Mountains to this exciting new appointment. Matthew officially started in the Environment Manager role on 10 March.



IMAGE: Welcome to Blue Mountains City Council new Environmental Manager – Matt Chambers
CREDIT: BMCC

Seniors Week Recognition Awards

Two of our Bushcare volunteers were honoured at the annual Seniors Week Recognition Awards at Springwood recently.

Ian Glover

Ian is a well-respected, conscientious and hardworking Bushcare volunteer. His dedication in caring for the local natural environment is shown by his reliable attendance of the following Council and NPWS Bushcare/Landcare Groups:

- Sutton Park Bushcare Group (Council)
- Woody Weed Wander Bushcare Group (Council)
- Remote Bushcare (Council)
- Coordinator/member of Valley View Swampcare Group (Council)
- Braeside Bushcare Group (NPWS)
- NPWS and Council Bushcare/Swampcare Events

Ian is always willing to support other volunteers in sharing knowledge and ideas, as well as assisting with transport. He is very supportive of friends who need help during times of illness or in general need.

Ian's love of the natural environment and of his fellow volunteers are admirable qualities.



IMAGE: Ian Glover receiving his Seniors Award
CREDIT: BMCC

Ian Power

Ian is extremely hardworking and dedicated to caring for the local natural environment. He is very much a team player and has been a longstanding volunteer with the following Council and NPWS Bushcare/Landcare Groups:

- Braeside Bushcare Group (NPWS)
- Prince Henry Cliff Walk Bushcare Group (NPWS)
- Valley Of The Waters Bushcare Group (NPWS)
- Brahma Kumaris Landcare Group (Council)
- Woody Weed Wander Bushcare Group (Council)
- Vale Street Bushcare Group (Council)
- Marmion Swamp Bushcare Group (Council)
- Valley View Swampcare Group (Council)
- Gordon Falls Reserve Bushcare Group (Council)
- NPWS and Council Bushcare/Swampcare Events

Ian has also volunteered with the Secret Garden at Richmond for several years. This Garden welcomes people of all ages and abilities to work, learn, socialise, volunteer and enjoy. He also diligently works at the Brahma Kumaris gardens, which is a meditation retreat, providing a quiet refuge for contemplation for visitors/participants.



IMAGE: Ian Power working happily at one of the many groups he attends - Valley View Swampcare at Blackheath
CREDIT: BMCC

Clean Up Australia Day in The Gully

By Jane Anderson

A beautiful day greeted over 40 volunteers to The Gully for Clean Up Australia Day on 7 March.

The good news was there was not enough rubbish for everyone so we found other worthwhile tasks. Some of Garguree Swampcare group were busy restoring and expanding habitat areas for the aquatic fauna and bird life that live around or visit the Catalina Lake.

Other volunteers planted in our newly created lake habitat area, along the creek line and in the Bushtucker garden – all part of work supported by a Protecting our Places Environmental Trust grant.

Garguree has been involved for many years with Clean Up Australia and will continue to do so, hopefully with less and less litter every year.



IMAGE: Garguree Swampcare enjoys another successful Clean Up Australia Day in The Gully
CREDIT: BMCC

What's On!

Check Bushcare Events website
bushcarebluemountains.org.au/events for more details

JUNE

Kodala Lane Working Bee

Sunday 6 June 1.30 – 4.30pm

RSVP online here:

bushcarebluemountains.org.au/event/kodala-lane-working-bee-3

Remote – Knapsack or Sassafras. (TBC)

Friday 18 June 9 – 4pm

Bushwalking experience required.

RSVP to Steve at sfleischmann@bmcc.nsw.gov.au

JULY

Delight in the Deanei! – Springwood

Saturday 24 July 9.30am – 12.30pm

Learn about Bell Miner Associated Dieback and other work being undertaken to bring the forest back for the future.

RSVP on the website by following this link:

bushcarebluemountains.org.au/event/delight-in-the-deanei-springwood

This project has been assisted by the NSW Government through its Environmental Trust grant funding and Save our Species program.



Hazelbrook Weed Walk and Talk – Horseshoe Falls

Sunday 25 July 1pm – 4.30pm

RSVP online at: bushcarebluemountains.org.au/event/hazelbrook-weed-walk-and-talk-horseshoe-falls-2

AUGUST

Remote – Birdwood Gully

Friday 13 August 9pm – 4pm

Bushwalking experience required.

RSVP to Steve at sfleischmann@bmcc.nsw.gov.au

SAVE THE DATE!

**Our annual Bushcare Volunteer
'Thank You' Picnic will be on this year!**

Saturday 30 October

Sun Valley Reserve

Save the date
and start
designing for
the 'Recycle and
re-use Bushcare
fashion show'

Stay tuned
for more
details.



IMAGE: 2019 Bushcare Volunteer picnic

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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