

Gecko Newsletter



Spring 2020 No 82

Blue Mountains City Council Bushcare Program

Changes to Blue Mountains Bushcare volunteer activities due to COVID-19

Due to COVID-19, Bushcare activities have changed. There are now restrictions on the number of volunteers who can gather for our activities and social distancing is observed.

There are 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 is a wide range of meeting times and days 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.

For further information bushcarebluemountains.org.au/join-bushcare/

Celebrating 20 Years as a World Heritage Area

While Traditional Owners have cared for the Greater Blue Mountains Area for millennia, in December 2000 an important event in the history of our area occurred when the United Nations granted the region World Heritage status.

Sites which are included on the UNESCO World Heritage List are deemed to possess *Outstanding Universal Value*, which is defined as having '*cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations for all humanity*'.

Inclusion on this list put the Greater Blue Mountains World Heritage Area in the company of other world attractions like Mt Everest, the Pyramids of Egypt and the Great Wall of China, and led to the region receiving international recognition and protection.

Blue Mountains City Council (BMCC) is marking this important milestone from now until December by showcasing what it means to live in, and manage, a City within a World Heritage Area.

Each month, critical areas are being highlighted to emphasise how Council helps preserve an area of such special

significance, including recognition of indigenous and post-European-settlement cultural values, protection of the environment and threatened species, water resource management and strategic planning.

Throughout September, BMCC is highlighting the importance of "Protecting and Restoring Biodiversity" by putting a spotlight on the amazing work and contribution made by hundreds of volunteers in the Bushcare Program.

BMCC will also raise awareness of the vast number of threatened species in the Greater Blue Mountains Area in time for National Threatened Species Day on September 7. Areas such as responsible pet ownership and wildlife friendly behaviour, weed management and emergency management (such as preparing for bush fires) will also be featured.

For information details on these events go to: bmcc.nsw.gov.au/WHA



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Boost for Bushcare



IMAGE: Sue Cunningham (Team Leader, Natural Area Operations, BMCC) speaking about post-bush fire recovery relating to residents managing their backyards from Council's perspective.

Recovering our Backyards Expo and Videos

Following the bush fires earlier in the year, many people were asking "what can we do?" and "how can we help?" A community based mini-expo, *Recovering Our Backyards*, was hosted by the Blue Mountains Recovery Wellbeing Committee, Resilience & Preparedness Group and the Blue Mountains Animal Ready Community group in February.

The information day included three speakers, stalls of representatives from local groups and organisations with opportunities to volunteer including Bushcare.

The themes were based on what you can do around your own backyard, volunteering to help wildlife, assisting with recovery of our natural environment and how to join a local wildlife or conservation group.

Three speakers shared their knowledge and expertise including Sue Cunningham, Council's Team Leader of Natural Area Operations; Holly Parsons, Birdlife Australia; and Dr Kellie Leigh, Executive Director, Science for Wildlife, Blue Mountains Koala Project.

Recovering our Backyard presentations can be viewed at <https://www.mcrn.org.au/index.php/emergencies/recovery/recovering-our-backyard-volunteer>

We would love to hear from you and encourage Bushcare volunteers to submit stories for publication in the Gecko.

For more information contact your local Bushcare Officer or email bushcare@bmcc.nsw.gov.au

Boost for Bushcare

By Sandy Benson

BMCC, Sydney Trains and John Holland Engineering contractors have worked with the community on a major restoration project. The project focused on revegetation and restoration of Fairy Bower Reserve, Mount Victoria, and was funded by Sydney Trains as a Biodiversity Offset during the Mount Victoria Area Remodelling (MVAR) Project.

The primary goal was to increase biodiversity and habitat values at the site through planting of native species, improved access to the reserve and vehicle management, improvements to site drainage and tree and shrub weed control.

Central to this project was the involvement of the Fairy Bower Bushcare Group, who planted over 200 plants in the reserve to protect, restore and enhance the environment.

MVAR Project Manager, David Hugo said, "The Biodiversity Offset Scheme is a great initiative and in this case, the MVAR Project is proud that we are able to leave behind a small legacy for the people and visitors to Fairy Bower, to enjoy after we have gone".

Sydney Trains' effort was appreciated by Council's Bushcare Team Leader, Sandy Benson. "We again would like to extend our thanks for your support and willingness to collaborate with Council and our local community to achieve such a high-quality outcome," she said.



IMAGE: Mount Victoria Bushcare at Fairy Bower
PHOTO CREDIT: Sandy Benson



IMAGE: Bushcare volunteer, Lyne Wake planting along the railway reserve at Fairy Bower. PHOTO CREDIT: Sandy Benson

Chiloglottis - Wasp Orchid

By Karen Hising, Jan Allen and Keith Brister



Chiloglottis species – front view
(PHOTO CREDIT: K Brister)

Chiloglottis species – rear view
(PHOTO CREDIT: K Brister)

Jan Allen, a very observant Bushcare volunteer from the Upper Blue Mountains, found this beautiful Orchid. From research, we were not sure of the full identification, but we have been advised that it may be *Chiloglottis seminuda* - other experts may offer an opinion. The genera *Chiloglottis* is also known as the Wasp Orchid.

The common name comes from the “callus” - the glands on the labellum, which resemble the body of a female wasp. Instead of being attracted by the general offer of nectar or pollen, many orchid species, such as the native *Chiloglottis* genera, use sexual deception to attract male wasp pollinators. These orchids emit an odorous pheromone very similar to the sexual pheromone produced by females of the pollinator species, thereby luring the male to the flower with the false offer of sex.

Pollination occurs when the male wasps attempt to copulate with structures on the orchid labellum that mimic the wingless, ant-like female. The high degree of specificity between sexually-deceptive orchids and their pollinators indicates that there must be subtle, but important, differences in the pheromones produced among even closely related orchids.

A book that you might find interesting, regarding local orchids, is 'Orchids of The Blue Mountains' by Sabine Hanisch and Ben Jasiak.

References:

Uncovering The Sexual Tricks Of Orchid Flowers (Abstract)
– Julianne D Livingston

<http://press-files.anu.edu.au/downloads/press/n1676/pdf/ch04.pdf>

Memoirs Of The Museum Of Victoria 56(2):461-466 (1997)

Hidden Biodiversity: Detection Of Cryptic Thynnine Wasp Species Using Sexually-Deceptive, Female-Mimicking Orchids (Abstract) - Colin C. Bower and Graham R. Brown

<https://museums victoria.com.au/media/4804/jmmv19975639.pdf>

<http://peonyden.blogspot.com/2011/01/wasp-orchid-chiloglottis-reflexa-comes.html>

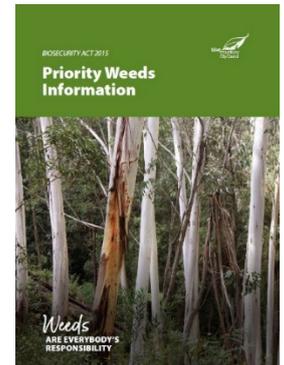
Updated Priority Weeds Information booklet

Priority weeds listed under the NSW Biosecurity Act 2015, are plants that have the potential to pose a biosecurity risk to human health, the economy, the liveability of our City and the environment.

Blue Mountains City Council provides a booklet, with a user-friendly colour-coded guide, showing the various control measures/methods and guidance on herbicides. The booklet also outlines Council's inspection process.

This is a valuable guide for all residents of the Blue Mountains - the backyard gardener, bushcare volunteers and professional bush regenerator contractors alike!

Download the booklet at <https://www.bmcc.nsw.gov.au/documents/priority-weeds-information-booklet>



Wet Weather Inspires Planting

By Jane Anderson

A wet July inspired Linksview Landcare and Beefarm Road Bushcare to use their Wildplant Rescue plant vouchers received for their outstanding 15 years of great Bushcaring.

Linksview Landcare Group planted Forest Oak (*Allocasuarina torulosa*) and Blueberry Ash (*Elaeocarpus reticulatus*) along a riparian zone to improve natural biodiversity and resilience in an area where contractors had recently removed large amounts of Privet.

Beefarm Road Bushcare Group planted Sedges (*Carex appressa*) along a weedy drainage line which had previously been covered by Crofton Weed. Over many years of removing this weed, the drainage line now has successional weed issues with Farmers' Friend (*Bidens pilosa*).

We are hoping for great results!



IMAGE: Linksview Landcare improving biodiversity along the riparian zone. PHOTO CREDIT: Council

World Heritage Area

Celebrating the 20th Anniversary of the Greater Blue Mountains World Heritage Area

As was mentioned earlier in the Gecko, in December 2000, the UNESCO World Heritage Committee granted the Greater Blue Mountains Area (GBMWA) a place on its renowned World Heritage list.

But why? What makes the Greater Blue Mountains Area so special?

The region was recognised for possessing these unique features:

- The one-million-hectare GBMWA covers the largest protected, most intact, sclerophyll (hard leaved) vegetation forest wilderness remaining within a broad range of temperate climates.
- The GBMWA is an exceptional living example of the evolution of modern Australian flora. This includes its present distinctive character in the classic Australian circumstances of low fertility soils, a drying climate and geographic isolation which is one of the great stories of the evolution of the earth's plant cover.
- The site is also noted for its representation of the evolutionary adaptation and diversification of the eucalypts in post-Gondwana isolation on the Australian continent. Approximately 100 eucalypt taxa (thirteen percent of the global total) occur within the GBMWA.
- The GBMWA is home to some ancient and extremely rare species such as the Wollemi pine (*Wollemia nobilis*) and Dwarf Mountain Pine (*Pherosphaera fitzgeraldii*). With links to the Gondwana era, these species provide yet another unique insight into the evolution of the earth's plant life.

Like many protected areas, the GBMWA faces threats to its immediate and long-term integrity. These include fire, climate change, urban development, human disturbance (including tourism) and pest species (plant and animal).

Council continues to uphold the outstanding values of the WHA through ongoing efforts to protect and restore biodiversity. These efforts include stormwater management, the Healthy Waterways program, threatened species protection, weed management and a strong and thriving Bushcare program. bushcarebluemountains.org.au/

To find out more about Council's efforts to preserve our beautiful region go to: <https://www.bmcc.nsw.gov.au/WHA>

Sourced from UNESCO World Heritage List – Greater Blue Mountains Area <https://whc.unesco.org/en/list/917/>



IMAGE: An aerial view of the Greater Blue Mountains World Heritage Area observed from Leura escarpment. PHOTO CREDIT: Council



IMAGE: Dwarf Mountain Pine (*Pherosphaera fitzgeraldii*) at Leura (1) Close up (2). PHOTO CREDIT: Wyn Jones (1) and Jamie Plaza (2)



IMAGE: Blue Mountains Swamp Skink *Eulamprus leuraensis*. PHOTO CREDIT: Council

For further information

BMCC Threatened Species

<https://www.bmcc.nsw.gov.au/environment/bushland-management/threatened-species>

BMCC Blue Mountains Fauna Inventory

https://www.bmcc.nsw.gov.au/sites/default/files/docs/BMFP_INVENTORY_REPORT_Final251119.pdf

Native Fauna of the Greater Blue Mountains World Heritage Area (by Judy Smith, Peter Smith and Kate Smith)

<https://bmnature.info/fauna-gbmwha.shtml>

360° panoramas of the Greater Blue Mountains World

Heritage Area's national parks and reserves: Blue Mountains Conservation Society: Greater Blue Mountains World Heritage Experience

<https://www.bluemountains.org.au/gbmwhe.shtml>

Opportunity knocks - a cross-team effort!



Bushcare and Bush Regeneration staff removing weeds during the Cliff Drive Road closure. PHOTO CREDIT: Council

Recently, Council's Bushcare and Natural Areas Operations' cross-team efforts tackled some long-term weed projects in the Upper Mountains.

Weeds along the busy tourist Cliff Drive have always posed a major problem – how to safely access and treat them? So when tourist numbers dropped over the COVID-19 period, a rare opportunity to close a section of Cliff Drive near Carrington Park, Katoomba was seized by the Council's Natural Area Operations team. To maximise this opportunity all hands were needed and members from NAO and Bushcare teams came together resulting in a number of successful days of weed removal along this highly visible road edge.

Another cross-team day focused on another long-term weeds issue – woody weeds under the Mexican Pines at Pitt Park, Wentworth Falls. This has been a goal of



Joint Bush Regeneration and Bushcare team effort - removal of woody weeds under the Mexican Pines, Pitt Park. PHOTO CREDIT: Council

one our long-term Bushcare volunteers, and last year's Bushcare Legend – Lachlan Garland.

Natural Area Operation's Team Leader, Sue Cunningham said: "What I found rewarding about the cross-team collaboration, was the wide range of bush regeneration approaches staff brought to the day, exhibiting the diversity and depth of the Natural Area team's bush regeneration experience. Ideas and different approaches were discussed to ensure high quality restoration outcomes were achieved."

Lachlan Garland, former Convenor of the Jamison Creek Catchment Group, said he was "very pleased with the removal of some of the Mexican Pines, particularly around "Darwin's Oak" and also a range of other weeds. A continuation of the great work undertaken in this catchment in recent years."

The sticky facts on eucalyptus

There are over 890 species currently recognised as "Gum trees", which have adapted to nearly every environment in Australia. "Gum trees" is the generic term for Eucalypts. The term has been used to describe the sticky, gum-like sap or copious kino, that they exude from the trunk, due to damage to the bark caused by either insects, or trauma. This only applies to some Eucalypts and is not a characteristic that they all possess.

The term "Eucalypt" is often thought to only apply to the genus *Eucalyptus*, but there are three genera within the *Myrtaceae* family that are all known as "Gum trees" - *Eucalyptus*, *Corymbia* and *Angophora*.

There are more than 700 species of *Eucalyptus*, with *Corymbia*, a relatively new genus described in 1995. It contains 113 species, 80 of which were formerly within *Eucalyptus*. *Angophora* consists of about 13 species.

There are a number of differences which distinguish the three main "Eucalypt" genera, which are described below:

- *Eucalyptus* and *Corymbia* have adult leaves alternate.

- *Eucalyptus* and *Corymbia* have flowers that have a cap (*operculum*), which falls off as the flowers open.
- *Angophora* has adult leaves that are opposite.
- *Angophora* flowers do not have a cap (*operculum*).
- *Angophora* and *Corymbia* flowers occur in "corymbs", where the outer flowers have longer stalks than the inner flowers, so the flowers appear like an upside-down umbrella, with all the flowers appearing on the flat side.



IMAGE: *Angophora*. PHOTO CREDIT: Ian Brown

Saving the bush

Saving the bush: Historic weed management in Australia

Peter Ardill, South Lawson Park Bushcare Group

By the 1850s, colonial state governments were managing weeds that threatened crops and plantation timber resources. But when did weeding work, that was intended to protect indigenous flora (as contemporary Bushcare attempts to do) first take place in Australia?

The earliest known project occurred in 1894. Here's the story.

The Clarence River valley, northern NSW, was traditionally occupied and cared for by the Bundjalung, Gumbaynggirr and Yaegl nations. In the 1840s, their lands were seized by colonial settlers, and the First Nations' communities were decimated by massacres, disease, starvation and alcohol. The beautiful riverbank rainforest, Lowland Rainforest on Floodplain, was logged, and then almost entirely cleared for farming.

The fifty-nine hectares of rainforest that covered Susan Island, Grafton, were fortunately not cleared, and from the 1870s, the trustees of the recreation reserve, who included naturalists, James Fowler Wilcox of *HMS Rattlesnake* expedition fame, and son James Clarence Wilcox, carefully managed the flora. "The trustees have desired to preserve the island...visitors will see the great fig tree... the great red and flooded gums, the cedar, the bean, the beautiful tamarind and tulip trees...". Despite demands for development, by 1890, only seven per cent of the rainforest had been modified.

Lantana was introduced to Australia in approximately 1840 and was widespread by the 1870s. The threat that it posed to the Susan Island rainforest was documented in 1894:

"This plant, unless checked, will in time, it is feared, overrun and consequently destroy the beauty of the natural and indigenous bush and trees. An effort is now being made to keep it in check". Slashing work was undertaken, and perhaps Australia's first bushcare sessions took place on Susan Island, as visitors were encouraged to hand remove lantana seedlings.

Despite more weeds and development, sixteen hectares of the rainforest survived and still exists today, as Susan Island Nature Reserve. It is managed by the Traditional Custodian Nyami Julgaa women's group, the local community, and the

National Parks and Wildlife Service. The story of Susan Island further confirms that post 1788, Australian environmental history was not entirely characterised by settler exploitation of the natural environment, but also featured instances of delight at ecological diversity and unique forms of beauty, and concerted efforts to protect these qualities.

In 1935, Ambrose Crawford commenced restoring the Big Scrub rainforest on the NSW north coast, and in 1936 Albert Morris initiated the Broken Hill regeneration area project.

The 1960s saw the commencement of Roger Good's Kosciuszko restoration work (which, as Eric Mahony has commented, was to have a significant influence on restoration techniques in the Blue Mountains Swamps), and development of Joan and Eileen Bradley's Sydney bush regeneration technique.

Reference: Peter J Ardill. 'Colonial and twentieth-century management of exotic species threatening intrinsically valued indigenous flora: Susan Island, Lumley Park, Broken Hill', *Australasian Plant Conservation* 28:2 (September – November 2019) 26.



Susan Island 1945, showing decimated rainforest areas. Future nature reserve sited at further point.

(PHOTO CREDIT: Charles Pratt, State Library Victoria)

The Aussie Backyard Bird Count is back from October 19-25

The #AussieBirdCount is a great way to connect with the birds in your backyard or bushcare site no matter where your backyard happens to be. Count as many times as you like over the week, we just ask that each count is completed over a 20-minute period. The data collected assists BirdLife Australia in understanding more about the birds that live where people live. **Look out for events in October at: www.aussiebirdcount.org.au**



These events will follow COVID-19 protocols - bring your own afternoon tea (unless otherwise specified). Numbers will be limited and safe, social distancing will be observed.

SEPTEMBER

Kodala Lane Bushcare at Glenbrook Lagoon (Glenbrook) **Sunday 6 September, 1.30 – 4.30pm**

Join us as we restore the bushland at Kodala Lane. Learn more about the local bushland and restore the local area. RSVP by Wednesday 2 September on www.bushcarebluemountains.org.au/events. For further information contact Nathan on 4780 5623 or nsummers@bmcc.nsw.gov.au

National Threatened Species Day **Monday 7 September, 2020**

Rocklea Swamp (Hazelbrook) **Tuesday 22 September, 9am – 3pm**

Plenty of weed work to be done in this little known mid-mountains spot! Lunch and morning tea donated by Hominy Bakery. Numbers are limited. RSVP by Monday 14 September on www.bushcarebluemountains.org.au/event/rocklea-swamp-hazelbrook. For further information contact James at jbevan@bmcc.nsw.gov.au

GGWW Mt Victoria at Headwaters of the Grose River (remote) **Thursday 24 September, 9am – 4pm**

Explore the headwaters of the Grose River and continue previous work to stop the weed invasion further downstream and into the swamp. Be prepared for wet feet, some experience necessary. Numbers limited. Book by Thursday 17 September with Grant Purcell (NPWS) on 0499 699 150 or grant.purcell@environment.nsw.gov.au

Weed, Walk and Talk at Burgess Falls (Hazelbrook) **Sunday 27 September, 1.30 – 4.30pm**

Come and learn about the bushland in Hazelbrook - this involves some easy weeding followed by an interesting walk in the local area. RSVP by Thursday 24 September on bushcarebluemountains.org.au/event/hazelbrook-weed-walk-and-talk-burgess-falls-3 or contact Nathan on 4780 5623 or nsummers@bmcc.nsw.gov.au

OCTOBER

The Aussie Backyard Bird Count is back from October 19-25 www.aussiebirdcount.org.au

GGWW Popes Glen (Blackheath - remote) **Saturday 3 October, 9am – 4pm**

A joint NPWS and BMCC (Council area subject to confirmation) activity visiting a recently burned creek line - a historic harbour for Gorse and Broom seedlings. Bushwalking experience necessary – walking off track and wading in creeks. Morning tea and lunch supplied. Numbers limited. Book by Wednesday 23 September with Grant Purcell (NPWS) on 0499 699 150 or grant.purcell@environment.nsw.gov.au

Valley View Swamp (Blackheath) **Thursday 8 October, 9am – 3pm**

Help us continue the ecological restoration of this Endangered Ecological Community targeting biosecurity threats such as English Holly surrounding the swamp. This site filters the headwaters of Govetts Creek, which flows into the Grose Wilderness. Morning tea and lunch donated by the Hominy Bakery. Numbers limited. RSVP by Friday 2 October on www.bushcarebluemountains.org.au/event/valley-view-swamp-blackheath-2. For further information contact James on 4780 5623 or jbevan@bmcc.nsw.gov.au

GGWW Grose River 3-day trip (remote) **Saturday – Monday, 10 – 12 October**

The jewel in the crown! This multi-day activity is ideal for the fit and adventurous, who want to spend three days rock hopping and weeding along the river. Some experience in bushwalking and self-sufficient camping is required. Numbers limited. Book by Wednesday 30 September with Grant Purcell (NPWS) on 0499 699 150 or grant.purcell@environment.nsw.gov.au

Kittyhawk Swamp (Wentworth Falls) **Wednesday 21 October, 9am – 3pm**

Come and join the long-term, landscape-wide ecological restoration efforts to improve this Endangered Ecological Community. Lunch and morning tea donated by the Hominy Bakery. Numbers limited. RSVP by Thursday 15 October on www.bushcarebluemountains.org.au/event/kittyhawk-swamp-wentworth-falls. For further information contact James on 4780 5623 or jbevan@bmcc.nsw.gov.au

Sunset Rock (Mount Victoria - remote) **Sunday 25 October, 8.30am – 5pm**

A new remote Bushcare site extending the work done by the Mt Victoria bushcare group to stop invasive weeds from moving

into the Kanimbla Valley. Medium level of fitness and some bushwalking experience is needed. Numbers limited. Book by Tuesday 20 October with Steve on 4780 5623 or sfleischmann@bmcc.nsw.gov.au

GGWW 1st Braeside Broom and Gorse Blitz (Blackheath) **Sunday 25 October 9am – 3pm**

Come and support the Braeside Bushcare Group - spend the day hunting Gorse and Broom seedlings which have sprouted in large numbers, post-fire. Our chance to fight them off once and for all! Minimal bushwalking involved. All welcome. Morning tea and lunch provided. Book by Friday 16 October with Grant Purcell (NPWS) on 0499 699 150 or grant.purcell@environment.nsw.gov.au

NOVEMBER

GGWW Katoomba Creek (NPWS - remote) **Friday 20 November, 8.30am – 5pm**

Continue the great work done over the past 16 years in a remote section of Katoomba Creek. Bush regeneration and bushwalking experience are essential – involves off-track walking and wading along the creek. Morning tea and lunch supplied. A joint NPWS and BMCC activity - numbers limited. Book by Wednesday 11 November with Grant Purcell (NPWS) on 0499 699 150 or grant.purcell@environment.nsw.gov.au

Weed, Walk and Talk – Gloria Park (Hazelbrook) **Sunday 22 November, 1.30 – 4.30pm**

Come and learn about the bushland in Hazelbrook - this involves some easy weeding followed by an interesting walk in the local area. RSVP by Thursday 19 November on www.bushcarebluemountains.org.au/event/hazelbrook-weed-walk-and-talk-gloria-park-3 or contact Nathan on 4780 5623 or nsummers@bmcc.nsw.gov.au

Great Grose Weed Walk - Second Braeside Broom and Gorse Blitz (Blackheath)

Sunday 22 November, 9am – 3pm

Come and support the Braeside Bushcare Group hunting Gorse and Broom seedlings which have sprouted up post-fire. Minimal bushwalking involved. All welcome. Morning tea and lunch provided. Book by Friday 13 November with Grant Purcell (NPWS) on 0499 699 150 or grant.purcell@environment.nsw.gov.au

Seasonal Calendar

Source: A timeline for the Upper Blue Mountains.
Compiled by Jim Smith for the Blue Mountains Conservation Society.

Weather

- September is the driest month.
Equinox on 22 September.

Mammals

- Spring peak of Bush Rat, *Rattus fuscipes*, and Swamp Rat, *Rattus lutreolus*, numbers. Many juveniles born August/September.
- Female Antechinus with young through to October.
- Echidnas wander.
- Brush-tail Possums call (spring to autumn), mating.
- Ringtail Possums, Sugar Gliders, Yellow-bellied Gliders and Pygmy Possums born through to summer.
- November:** Antechinus weaned.
- Road kills as juvenile mammals disperse.

Reptiles and Frogs

- September:** Many lizards active; chasing, mating.
- First snakes to emerge: Copperhead and Red-bellied Black Snake.
- After equinox, Perons Tree Frogs call at night. In a good year Whistling Tree Frogs will call a few weeks after equinox too (calls can overlap).

Insects

- October:** Common Jezebels, *Delias nigrina*, white butterflies active.
- Imperial White Butterflies, *Delias harpalyce*, active (larvae feed on mistletoe). Red Ichneumonid Wasps, *Netelia producta*, swarm. Larvae is parasitic on moths.
- Nellies Glen Butterflies mating on hilltops (September - November) e.g. at Pulpit Hill.
- Cicadas emerge.

- November:** Common Brown Butterflies, *Heteronympha merope*, mating eggs, dropped from air to grass. Swordgrass Brown Butterflies, *Tisophona abeona* larvae on Ghania (swordgrass).
- Caper White Butterfly migration to north-east.
- Tachinid Flies (mid November).
- Whistling Moths, *Hecatesia fenestrata*, begin to call on hot nights before rain. Larvae feed on Dodder, *Cassytha sp.*
- Christmas Beetles emerge.
- Termites fly.
- Fireflies (late November - early December).

Aquatic

- Female Crayfish with 'berries' (young).
- September:** First major hatching of Galaxias fry.
- November:** Second major hatching of Galaxias fry.

Birds

- September:** Migrants return: Rufous Whistlers from Qld, Sacred Kingfishers from Qld, New Guinea (NG).
- Southwards honeyeater migration peaks.
- Satin Bowerbirds display, mate, lay eggs.
- Rose Robins return to gullies.
- Kookaburra calls increase.
- Many juvenile New Holland Honeyeaters dispersing.
- Channel-billed Cuckoos arrive.
- October:** Satin Flycatchers arrive from Qld, NG.
- Black-faced Monarchs and Rufous Fantails arrive, from Qld, NG.
- Koels arrive from Indonesia.

- November:** Many young birds being fed.
- Satin Bowerbirds hatching.
- Silvereyes feed on Cedar Wattles, *Acacia elata*, extra-floral nectaries.

Plants

- Grevilleas:** *Grevillea phyllicoides*, *Grevillea mucronulata* flower.
- Epacridaceae flowers: *Woolsia*, *Epacris microphylla*, *Epacris pulchella* flower.
- Leucopogon flowers perfume the air from September/October.
- Peas flower:** e.g. *Bossiaea rhomboides*.
- Orchids:** Sun Orchids, *Thelymitra*; *Caladenia* (August - December); Flying Ducks (November)
- Endemics:** *Alania endlicheri*; *Sprengelia monticola*; *Epacris reclinata* flower.
- Miscellaneous:** Mistletoes, Casuarinas, Grass Trees, *Hibbertia sp.* flower.
- Boronia floribunda** (October), Kunzia & Isopogon flowers (late October).
- Black Ash, *Eucalyptus sieberi*, flowers (October/November).
- Peppermint Gum, *Eucalyptus piperita*, flowers (November).
- Introduced Elm trees release their winged seeds.
- November:** Native Currant fruit drops.
- Christmas Bush and Waratah flowers.
- Rainforest canopy:** Coachwood, Sassafras flower (September), Wonga Vine (October).
- New growth leaf of Coachwood is purple.
- New growth leaf of Possumwood is pink.
- New growth leaf of *Acacia elata* is silvery.



Bushcare Contact Details:

Phone: 4780 5623

Email: bushcare@bmcc.nsw.gov.au

Web: www.bushcarebluemountains.org.au



If undelivered please return to:
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