Blue Mountains Bushcare volunteer activities recommence

Bushcare activities are getting underway again in June!

Our Bushcare Team will keep volunteers updated on how our program’s activities have changed, due to the COVID-19 pandemic. There will be restrictions on the numbers who can gather for our activities and social distancing will be 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 are a wide range of meeting times and days to suit everyone.

The Bushcare Officer provides training for all skill levels. No previous experience necessary, just enthusiasm! If you’re interested in joining - bring a hat, water and wear suitable clothing and sturdy shoes.

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

Bushcare in the time of COVID-19
By Sandy Benson (Bushcare Team Leader)

The Blue Mountains community has seen a lengthy period of disruption to our way of life this year, firstly with the bush fires and now with COVID-19.

We temporarily suspended our Bushcare program due to the COVID-19 pandemic. But while Bushcare was put on hold to ensure the safety of our volunteers, we were not idle!

Bushcare Officers continued to look after Bushcare sites and updated Site Management Plans. We regularly reached out to our volunteers, to ensure that everything was okay. We also made some social media videos – and we do have some stars in the making. So keep a keen eye out for them!

It’s amazing to see what people have been up to, while in isolation. It looks like those “to do lists” have either been getting shorter (or longer, for some).

Volunteers also continued to engage in their own Bushcare activities.

During self-isolation many of us have felt the need, more than ever, to connect with other people in our community. So we connected in new ways, like social media and Zoom meetings.

The suspension of our operations, also enabled us to look at new and innovative ways of delivering the program to our community.

So, the short and long term effects of COVID-19 will therefore be unprecedented.

We are all keen to get back out into the bush. It may be different than it was before, with some changes to how we interact going forward. But eventually we will be able to hug each other and share our COVID-19 stories over a cuppa, and a cake or biscuit, or two.

See the inside of the back cover of the Gecko for an overview of our COVID-19 safety protocols. We need to adhere to them, to keep ourselves and each other safe.

IN THIS ISSUE...
- Costa visits Garguree
- Fauna Inventory Online
- Citizen Science links
- Collecting seeds
- Post fire weeds
- Colonising plant species
- Post fire fungi
- Check feeding watering stations
- Turtle Island launch
- Bushcare Volunteer ventures
- Natives and weeds
- Seasonal calendar
ABC Gardening Australia

Costa visits Garguree
By Jane Anderson

A lovely day greeted us in February and we were all up early to meet the team from ABC. Costa, our favourite Gardening Australia presenter, arrived to talk to Aunty Sharyn and David King about Garguree, and the work Bushcare has done in The Gully.

Yellow-tailed Black Cockatoos circled as they all talked, and it feels great to know The Gully’s story of healing and restoration will be shared with more and more people when the Gardening Australia episode airs. The Bushcare volunteers were filmed weeding and planting while Costa interviewed some of the kids, asking them why it was important to work at Garguree.

After much talking, working, multiple takes and filming, Aunty Sharyn and David welcomed us to Country and we shared a gorgeous morning tea with Costa and the lovely Gardening Australia crew. Jacqui from EarthSeedFire made the most fantastic bush tucker spread. Hominy Bakery supplied lovely cakes and pizzas and Garguree volunteers brought treats to share. I think I heard Costa say it was the best spread they have ever had!

It was such an honour to be part of the day and part of The Gully story, watch out for it in the next few months. CLICK here to read or download the questions asked by Gardening Australia pre-filming.

Blue Mountains Bushcare welcomes new Bushcare Officer - James Bevan

Integral to Bushcare is depth of knowledge, understanding and leadership, and we are delighted to introduce you to our new Bushcare Officer, James Bevan, who has these qualities in spades!

You may have already met James on site, with our experienced Bushcare Officers. James has ten years’ experience in both aquatic and terrestrial Australian ecosystems applying his knowledge and skills across a variety of fields from ecological consulting, bush regeneration and training young adults. James studied a BSc.(Hons) at Sydney University, and his previous employers have included The Good Bush People, Conservation Volunteers Australia and The Australian Museum. James began appreciating the Blue Mountains’ bushland as a teenager, and is thrilled to be working as a Bushcare Officer.

We would like 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

Blue Mountains Citizen Science frog conservation

The Blue Mountains Frog Search Citizen Science program aims to monitor three key threatened frog species around the Blue Mountains region using acoustic data loggers. These data loggers will be installed near waterbodies across various sites and allow for the detection of frog species using their unique calls.

As part of the project, Citizen Scientists have the opportunity to manage an acoustic data logger (including installation, maintenance and retrieval), as well as learn how to identify the unique calls for each frog species and analyse the data collected. Training will also be provided in the use of mobile phone apps, such as iNaturalist and FrogID. Online training is currently being provided via Microsoft Teams, however, this will be extended to include face-to-face workshops and field trips in the coming months. If you are interested in becoming involved in the project or would like to know more, please contact Alana Burton at Alana.L.Burton@uon.edu.au or on 0448 462 004.

The Blue Mountains Fauna Inventory is a “living” document which will be updated as we collect more records and a great resource for anyone interested in local fauna.

A total of 472 species were recorded from all sources, including 51 threatened species. After a ‘clean up’ of the records, the Inventory documents 453 species, including 93 species that had only one or two records. The Inventory includes species profiles that contain a distribution map, species images and information for each of the 360 species with more than two records.

The Blue Mountains Fauna Inventory is available as an electronic resource on Council’s website.

**Post fire weeds**

By Sandy Benson

Many weed species in the Blue Mountains are 'fire-responsive'. Post-fire conditions make it easy for weeds to establish due to favourable conditions, they germinate prolifically and can spread vigorously within the first few seasons.

Weed species gradually establish long-term soil seed banks that are triggered to germinate en masse by fire. In the absence of targeted weed control, weed species rapidly spread and can form a dense 'carpet', outcompeting native species.

However, this can be to your advantage. It's a great time to treat weed infestations as they are more accessible than ever before. Usually they are the first to emerge, easy to spot but also easy to access. If you control emergent weeds before they set seed, you'll be able to get on top of these weedy patches much more quickly. Timely post-fire management action (usually within 18 months) is necessary for control.

**Opportunities**

Improved access post-fire provides an excellent opportunity to control weeds that are not usually easily accessible. This certainly applies to dense riparian vegetation and our weed management strategies.

Improved access post-fire makes it easier for weeds to establish due to favourable conditions, they germinate prolifically and can spread vigorously within the first few seasons.

**Weed seed bank explosion in usually unaffacted areas**

Weed seeds can remain dormant in the soil for many years. The fruits of weeds are attractive to a wide range of animals that can spread seeds such as foxes, rabbits and bird species. Seeds can also be spread by dispersal from the parent plant or by wind or water. This may increase the number of weeds present at a site in the short term. But over time with weed treatment it can deplete the weed soil seed bank, and be replaced by native species and a healthier natural state in the long term.

Likely pathways of weed seedlings germinating in areas previously clear of weed species are post-fire flooding, wind and bird distributed seeds from neighbouring unburnt areas. Post-fire these seedlings once mature, set seed and are likely to spread dramatically.

An opportunity exists where, a weed seed bank explosion can lead to a weed seed bank depletion. Fire can result in one-off increases in weed densities, which after subsequent fires rapidly decline if weed treatment is quick and consistent. If weed seedlings are not controlled, they will outcompete native seedlings, exhausting the native soil seedbank.

Consistent follow-up seedling control is necessary in areas of low fire intensity, near water sources, and where seeds have dispersed into the burnt area from unburnt sections of the population. This can happen particularly in the Blue Mountains where seed from unburnt areas can carry down a slope and be deposited on burnt ground. The removal of these seedlings before they mature and set seed is a high priority.

Weeds commonly displaying this type of fire response in the Blue Mountains include:

- Gorse Ulex europaeus
- Cape Broom Genista monspessulana
- Scotch/English Broom Cytisus scoparius
- Perennial grass Ehrharta calycina
- African Lovegrass Ergratisis curvula
- Coolatai Grass Hyparrhenia hirta
- Patersons Curse Echium plantagineum
- Cotonester Cotoneaster spp. (franchetti, pannosus, lacteus, glaucophyllus, horizontalis)
- Cape Broom Genista monspessulana
- Scotch/English Broom Cytisus scoparius
- Gorse Ulex europaeus
- Lantana Lantana spp.
- Cotoneaster Cotoneaster spp. (franchetti, pannosus, lacteus, glaucophyllus, horizontalis)

**Climber, scrambler or creeper**

Usually fire kills adult climbers, scramblers and creepers, but triggers germination in the soil weed seed bank. These seeds dependent on the species can return in denser infestations, particularly with climbers that produce many seeds in their fleshy fruits. These seeds are usually favoured by birds so may be found close to the parent plant or in a new location.

In the Blue Mountains look for:

- Banana Vine Cardiopermum grandiflorum
- Banana passionfruit Passiflora mollissima
- Blackberry resprouting from the base of mature Blackberry post fire

**Kill mature plants/seed bank explosion**

Depending on fire intensity and thickness of the weed species trunk or stem, fire can kill adult plants with little or no resproutting post-fire. However, weed seeds are long lived, remain in the soil and can be triggered to germinate by fire. Many of the Blue Mountains most invasive and pervasive woody weeds fall into this group.

**Trees and shrubs**

- Some trees and shrubs are killed by fire and do not sucker or resprout post-fire, these plants rely solely on seed to regenerate. Many germinate straight after fires. The removal of seedlings and juveniles before they mature and set seed is a high priority.

Trees commonly displaying this type of fire response in the Blue Mountains include:

- Radiata Pine Pinus radiata
- Holly Ilex aquifolium
- African Olive Olea europea spp. cuspidata

**Woody Weeds**

- Gorse Ulex europaeus
- Climer, scrambler or creeper - When burnt these species may receive a boost post-fire with vigorous resprouting and/or seedling regeneration into fertile, sunny sites. Response is strongly dependent on fire severity.

Weeds species with a bulb, corm, rhizome or tuber are protected from the heat by being located underground. Some weeds resprout from the base of burnt mature plants from regenerative buds protected underground or beneath layers of bark. There is a short-term decrease and reduction in biomass and/or densities as mature plants are temporarily 'weakened' post fire. There is an opportunity to achieve better results if prompt weed treatment is undertaken on fire weakened weeds.

- Blackberry Rubus fruticosus spp
- Balloon Vine Cardiopermum grandiflorum
- Cats Claw Creeper Dolichandra unguis-cati syn. Macfadyenia unguis-cati
- Japanese Honeysuckle Lonicera japonica

**Bulbs, corms, tubers or rhizomes**

Weeds species with a bulb, corm, rhizome or tuber are unlikely to be burnt by fire as the corms or tubers are protected from the heat by being located underground. Many species resprout vigorously post-fire and can invade bare ground.

The removal of corms or tubers is a high priority. Those with long strappy leaves can be treated by wiping (wiping herbicide along the strappy leaves with a herbicide wiper).

Weeds commonly displaying this type of fire response in the Blue Mountains include:

- Montbretia Crocosmia x crocosmiiflora
- Watsonia Watoniosa meriana var. bulbillifera
- Turkey Rhubarb Acetosa sagittata
- Morning-glory Ipomoea purpurea
- Madeira Vine Anredera cordifolia

![Blackberry resprouting from the base of mature Blackberry post fire](Photo: Sandy Benson)
Post fire weeds

Suckering

Weed species can sucker post-fire, meaning its principal means of propagation is suckering from the roots vegetatively. Trees under stress post-fire can send up numerous suckers as a defensive mechanism. This can lead to dense stands forming and a monoculture of the same species, excluding all native species from that site. Weeds commonly displaying this type of fire response include suckering trees, suckering woody weeds and brambles.

Trees and shrubs - Mature Camphor Laurel trees have been documented suckering profusely after being burnt.

Weed management should be undertaken by killing the parent tree and suckering plants by treating each with herbicide. Weed trees commonly displaying this type of fire response in the Blue Mountains are:

- Tree of Heaven Ailanthus altissima
- Weeping Willow Salix babylonica
- Small and large leaf Privet Ligustrum spp.
- Sycamore Platanus orientalis
- Camphor laurel Cinnamomum camphora
- Black Locust/Robinia Robinia pseudoacacia

Wood Weeds - There are a limited number of wood weeds that sucker or resprout post-fire in the Blue Mountains. These should be treated with herbicide as a high priority. Look for:

- Spanish Heath Erica lusitanica
- Cotoneaster Cotoneaster spp.
- Cotoneaster
- Black Locust/Robinia "Robinia pseudoacacia"

Are weeds good after fire?

Weeds can act as a buffer to reduce erosion and as a cover crop for native seedlings and animals post fire while natural regeneration occurs.

Erosion risk increases after a fire due to the lack of groundcover to stabilise the soil which slows down the speed of runoff. Weeds are usually the first plants to emerge after fire. If left for 3 to 6 months they can act as a ground layer, the plant roots stabilise the soil, and stems and leaves slow the water to give it time to percolate into the soil profile.

At the early stages any vegetation cover, including weeds can protect native seedlings. Weed seedlings grow quickly and can perform several jobs; protecting native seedlings from erosion, drying out, returning nutrients to the soil and to provide food and shelter for insects and animals.

Weeds can be helpful until a point, then they can become the bushlands worst enemy if left too long.

Assess burnt areas for weeds and the best control methods for the species. Control and target weeds before seed set, but limiting trampling as much as possible while bushland is still fragile.

When to treat weeds?

The months following a bushfire are among the best times to control weed species. However, it is very important to remember to leave burnt areas alone for the first 3-6 months to allow the soil to recover and native seedlings to establish, as over enthusiastic weed control can cause damage.

Post fire, soil forms a crust (soil sealing) that protects and reduces the loss of soil, organic matter and seedbank from rain events and erosion. The crust is formed through a combination of elements; when rain hits the soil, it dislocates the silt and clay making way for moss, lichen, algae or fungi, and cyanobacteria to enter which then forms a surface crust.

The combined protective cover elements such as the soil crust and seedlings can protect the soil throughout the first-year post fire. Natural regeneration is the priority.

Monitoring the site for weed growth indicators such as fresh new growth and flowering should be used as the cue for treatment. Take care to prevent any off-target damage to native plants.

Colonising species

Colonising plant species

Article by James Bevan

The concept

Plant species which establish after environmental disturbances events are known as ‘colonisers’, or colonising plant species. Following 2019-20 summer bushfires and floods, colonising plants are germinating from seed into the ground layer vegetation stratum. These autotrophic organisms (which produce their own energy as carbon from photosynthesis) are currently superabundant, capturing carbon for ecological communities across the Blue Mountains. This process is known as secondary ecological succession.

Interestingly, many colonising plant species are related members of certain plant families, such as the Grasses (Poaceae), Daisies (Asteraceae), Nightshades (Solanaceae), Peas (Fabaceae), and Mints (Lamiaceae). Some of the native and introduced colonising species which are currently abundant post-fire and are listed in the Table.

Practical application - Revegetation

Planted colonising species often have high survivorship rates on revegetation sites. Succession planting describes using colonising plant species during the first stage of revegetation, similar to the process of ecological succession. As our climate continues to change, plantings can expect to be exposed to extreme heat, longer summers and long periods between rain events. Planting colonising plant species with a high survivorship and fecundity may improve the efficiency of long-term ecological restoration.

The ecological communities found on your local Bushcare site will support locally adapted colonising plant species. Your local Bushcare Officer may be a good source of further advice on this topic.

Table 1: Examples of Colonising Plant Species.

<table>
<thead>
<tr>
<th>Family</th>
<th>Colonising Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poaceae (Grasses)</td>
<td>Right Angle Grass, Wry Panic (*Eutresia marginata)</td>
</tr>
<tr>
<td></td>
<td>Weeping Grass (*Microstachys stipoides)</td>
</tr>
<tr>
<td></td>
<td>Australian Basket Grass (*Optimenes aemulus)</td>
</tr>
<tr>
<td></td>
<td>Panic Veldtgrass (*Ehrharta erecta)</td>
</tr>
<tr>
<td>Asteraceae (Daisies)</td>
<td>Sigesbeckia orientalis</td>
</tr>
<tr>
<td></td>
<td>*Fleabane (*Conyza spp.)</td>
</tr>
<tr>
<td>Solanaceae (Nightshades)</td>
<td>Kangaroo Apple (*Solanum aviculare)</td>
</tr>
<tr>
<td></td>
<td>*Blackberry Nightshade (*Solanum nigrum)</td>
</tr>
<tr>
<td>Fabaceae (Peas)</td>
<td>Hickory Wattle (*Acacia falcata)</td>
</tr>
<tr>
<td></td>
<td>*Dusky Coral Pea (*Kennedia rubicunda)</td>
</tr>
<tr>
<td>Lamiaceae (Mints)</td>
<td>*Scotch Broom (*Cytisus scoparius)</td>
</tr>
<tr>
<td></td>
<td>Cockspur Flower (*Plectranthus parviflorus)</td>
</tr>
</tbody>
</table>

*NB * indicates introduced species

Poem by Paul Pippen

After the Fires

Colonising plants initiating secondary succession at Carlons Creek, Blue Mountains National Park. Photo: James

After the fires …

Charred banksia cones open their orange-throated pods
Like a chorus of scorched clams
Screaming.

With plucky resilience, the grass trees
Flourish their topknots of bristling fronds.
From their blistered flanks, the sinuous angophoras proffer
sanguine posies of regrowth.
Melaleuca adorns their singed paper-mache suits
With lime-green plumage.

The once-lithe limbs of native copes
Have been cremated into misshapen corpses:
Victims of the breath of Vesuvius.
Gingerly, their orphaned offspring emerge
into the ashen breeze
with verdant promise and golden hope.

www.bushcarebluemountains.org.au
Turtle Island Launch

Turtle Habitat Island is launched!

Article by Nathan Summers

Blue Mountains Bushcare and the Healthy Waterways Team officially launched Turtle Habitat Island. This being a pilot project to construct a place where turtles could lay their eggs in safety.

A gathering crowd watched Council’s Mayor, Mark Greenhill, give the island its official send off, after which we were treated to Dr Ricky Spencer, of the University of Western Sydney, sharing his expertise on turtles. The event was attended by a number of people who were involved with the project, including the Glenbrook Lagoon Bushcare Group, people from the wider Bushcare community, Glenbrook Lagoon artists, Council staff and also students from local primary schools, who have been undertaking environmental studies at Glenbrook Lagoon. The students were from Glenbrook Primary and St Finbars.

This project set out to construct an island from relatively low-cost materials, which could be used as a prototype for future projects. The inspiration coming from Dr Ricky Spencer’s work on native Turtle populations in eastern Australia. Funding was provided from the NSW Premier’s Department in the form of a small grant to Glenbrook Lagoon. The project was a joint project involving the Bushcare community, Council’s Aquatic and Bushland staff, and the University of Western Sydney.

The project was motivated by the need to provide a safe haven for turtles to lay eggs away from predation. Declining Turtle numbers in Australia are of great concern, particularly noticeable are the small numbers of young recruits surviving in our populations. It is estimated that 95% of the turtle eggs laid do not survive to adulthood. It is estimated that 95% of the turtle eggs laid do not survive to adulthood.

Glenbrook Lagoon supports a large diversity of aquatic wildlife and is frequented by the Eastern Long-Necked turtle (Chelodina longicollis) and the Sydney Basin turtle (Emydura macquarii dharuk), making this an ideal location for such a project. Habitat for turtles comprising mostly logs, had previously been placed in the overflow ponds in the eastern corner of the lagoon. Significant work through external and internal funding has been invested into the Lagoon over the years in restoring its water quality, eliminating water weeds and regenerating the surrounding bushland and has been made possible with the contribution from the community and Council efforts.

A number of construction sessions were undertaken over a nine month period, in which the structure was built and refined. So far, we have been fortunate to find one batch of eggs laid in a sand container during the construction phase and turtles have been sighted using this island. We hope in seasons to come, we may appreciate generations of young turtles emerging from the island.

Welcome to the new Bushcare Group - Gulguwa

Article by Jane Anderson

A very enthusiastic group of new Bushcarers and a couple of team officially launched a new Bushcare Group in The Gully in March. Unfortunately, we only managed one work session pre COVID-19.

The name Gulguwa means “water falling into a stream”. The Gulguwa Group is regenerating the bush before the water heads into the stream and then the Gedumba Falls.

Resident from the area were Welcomed by David King, who talked about the cultural significance of The Gully, about Connecting to Country and how valuable the work of this new Bushcare Group will be in The Gedumba Catchment.

The Group became acquainted with the area and decided where they will focus their efforts. As the site has some intact resilient pockets of open bushland, the Group will begin removing woody weeds in a staged approach to open up the natives to the sunlight.

Blank canvas

Article by Malcolm McPherson

As part of the COVID-19 times we asked volunteers about taking ‘before’ and ‘after’ photos. This inspired Malcolm to tell his story - goals, struggles and challenges converting his concrete pad ‘front’ and ‘back’ yards into a native garden and native habitat.

When you buy a new house, the garden may not have been important to your decision. In my case, the garden was non-existent. It was a blank canvas. Worse than that, the front had been completely concreted over and a significant area of the backyard that was not under concrete was heavily shaded by neighbours’ deciduous trees. Removing the concrete slab was heavy work. I used a jackhammer, concrete saw and angle grinder for the first time in my life.

When designing a garden it is always necessary to consider physical constraints such as powerlines and clotheslines. Planting prickly or spiky plants next to paths is best avoided! There is always the temptation to choose plants that represent environments that we like. Tree ferns and other species that like a damp environment along stream banks are not going to survive on the top of the plateau where most of the older mountain town dwellings are located. Finding plants that live on the top of the plateau that can also tolerate shade was a challenge. It is not a common situation in nature in the mountains.

As with bushcare planting in denuded areas, planting is something of a gamble. Acacia terminalis is reputed to be a hardy colonising species, one that would seem to have been ideally suited to my bare garden. The few that have done well are in sheltered positions. Unlike bushcare locations, it is usually possible to keep up the water until plants are established. Until larger shrubs and trees are established, it is best to think of plant succession. In the beginning, it is about whatever grows. The end result may take some years to accomplish.

Contributions to the Gecko from volunteers are always welcome!

Your Newsletter is compiled by Bushcare Staff from Blue Mountains City Council with contributions from volunteers and Council’s Environment Branch staff. Contributions and suggestions are always welcome.

Please contact the Bushcare Team Leader at Bushcare, Blue Mountains City Council, Locked Bag 1005, Katoomba NSW 2780; telephone 4780 5528 or email bushcare@bmcc.nsw.gov.au.

Blue Mountains City Council BUSHCARE NEWSLETTER ❭ 8

www.bushcarebluemountains.org.au

Blue Mountains City Council BUSHCARE NEWSLETTER ❮ 9

www.bushcarebluemountains.org.au
**Natives and Weeds**

**Seen this plant?**

*Parthenium hysterophorus*

A Sutherland Shire Council invasive species officer found the Parthenium plants in Engadine and immediately notified DPI Biosecurity.

Parthenium weed can cause severe allergic reactions in people, including dermatitis and respiratory problems and can cause health problems in dogs and livestock.

This is the first recorded incursion of parthenium weed east of the Great Dividing Range and plans are in place to eradicate the weed in NSW.

Parthenium weed invades pastures and crops and poses a significant biosecurity risk to NSW.

Widespread in Queensland, parthenium covers an area of 18 million hectares in central areas of the state, causing millions of dollars in damage to live seen this weed around the Blue Mountains? – Datura (By Steve Fleischmann).

Recently found in a couple of sites around Blackheath has been the weed Datura stramonium or Thorn Apple. It has been noticed on sites adjacent to former agricultural land that has been disturbed by recent fires. Such behaviour lends credibility to the long viability of seeds of this species. Additionally it has been noticed producing seed while quite young.

*The plant has a strong smell, reminiscent of Green Cestrum, a white flower and grows to about one metre.*

Common Thornapple is a short-lived plant that grows in disturbed sites. Flowers are white-lilac, 6-8 cm long. Seed capsules are large and oval-shaped, with numerous spines varying in lengths.

*The entire plant is poisonous to humans, pets and livestock.*

Should poisoning occur, then seek immediate medical attention and follow the steps outlined in weeds.dpi.nsw.gov.au/Weeds/CommonThornapple

**What’s On!**

**Datura stramonium or Thorn Apple**

*By Steve Fleischmann*

**Seen this weed around the Blue Mountains?**

Recently found in a couple of sites around Blackheath has been the weed Datura stramonium or Thorn Apple. It has been noticed on sites adjacent to former agricultural land that has been disturbed by recent fires. Such behaviour lends credibility to the long viability of seeds of this species. Additionally it has been noticed producing seed while quite young.

*The plant has a strong smell, reminiscent of Green Cestrum, a white flower and grows to about one metre.*

Common Thornapple is a short-lived plant that grows in disturbed sites. Flowers are white-lilac, 6-8 cm long. Seed capsules are large and oval-shaped, with numerous spines varying in lengths.

*The entire plant is poisonous to humans, pets and livestock.*

Should poisoning occur, then seek immediate medical attention and follow the steps outlined in weeds.dpi.nsw.gov.au/Weeds/CommonThornapple

**What to expect at Bushcare**

**COVID-19 Protocols**

Bushcare recommended on Saturday, 6 June.

On your Bushcare day, the following safety practices and principles will now apply:

- Toolbox talks will be held with all volunteers to provide an overview of the current BMCC COVID-19 return plan for Bushcare. The meeting will be documented and acknowledged by all attendees (Bushcare Officer will sign for you to reduce contact with equipment.)
- Bushcare Officers will provide hand sanitiser/disinfectant/PPE.
- Volunteers are to regularly use the alcohol-based hand rub.
- All attendees are to maintain a minimum physical distance of 1.5m with all other attendees.

**Equipment**

Herbicide applicators and Council issued tools will be placed on a table, with one person at a time coming to collect.

**Morning tea**

While morning teas are an important social component of Bushcare activities, during the COVID-19 pandemic the following will apply:

- Volunteers are not permitted to bring food to share at Bushcare work sessions and events.
- Volunteers are to supply their morning tea (for their consumption).

**Maintaining site, WHS, and Volunteer attendance records**

Bushcare Officers will maintain all physical Bushcare Site record books. Bushcare Officers only will handle books and pens and sign on, for those volunteers attending.

- For those groups that maintain their book, the Volunteer Coordinator will handle books and pens and sign on, for others.

**National and local authorities will have the most up to date information on whether COVID-19 is spreading in your area.**

**What’s new!**

Check the NEW Resources pages we have added to our Bushcare website - providing volunteers with useful information.

- Videos (NEW) showcasing a range of fascinating topics from Blue Mountain Bushcare Groups and volunteers, biodiversity, threatened species, swamps, fauna, connecting kids with nature.
- Bushcare Kids (NEW) providing parents, carers and kids with a range of environmentally-based activities whilst at home.
- Apps & Links (NEW) showing useful links and apps.
- Keep updated with the Bushcare Website bushcarebluemountains.org.au/resources

**Whats on!**

- Currently all Council’s walking tracks are open
- Down the FrogID APP and listen and identify frogs around your local area.
- Catchment Meetings continue using Zoom (contact Bushcare Project Officer - Alison for assistance 4780 5320)
**Winter Weather**

**Mammals**

**June:**
- Swamp Rat (*Rattus lutreolus*) numbers peak (born May/June).
  - Many young present.
- Pygmy Possums and Feather-tail Gliders in torpor.
  - Quoll breeding season. Males wander.

**July:**
- Bush Rat (*Rattus fuscipes*) and Swamp Rat (*Rattus lutreolus*), numbers lowest, adults die off.

**August:**
- Marsupial mice, Antechinus, mating. Males die at end of mating season.

**Reptiles and Frogs**

- Broad-headed Snakes shelter under rocks (will bask in sun).
- Most reptiles in torpor.
- Goannas bask in sun.
- Whistling Tree Frogs continue to call.

**Insects**

- Ghost Moths fly
- Nellies Glen Butterflies (*Pseudoalmenus chlorinda*) pupate on wattles.
- Gnats swarm over heaths.
- Blue Spotted Painted Ladies (*Vanessa kershawi*) migrating south-brown butterfly. (late August)

**Birds**

**June:**
- Lyrebird calls peak breeding season.
- Flocking: Black Cockatoos, Satin Bowerbirds (males) and Red Wattlebirds.
- Crescent Honeyeaters seen on escarpments, influx from south, can breed in area.
- Influx of Eastern Spinebills (June to September). In lower mountains influx is in May to July.

**July:**
- ‘Spring’ begins for birds.
- Resident birds (insectivores) form territories, begin to breed.
- Tree Martins return.
- Male Superb Fairy Wrens turn blue.
- Lyrebird eggs laid.
- Many juvenile New Holland Honeyeaters.

**August:**
- Many breeding birds, territorial calls, eg. Fantail Cuckoo, Grey Shrike Thrush.
- Night calls (Booboo Owls, Tawny Frogmouths, Masked Lapwings) through to November.
- Young Lyrebirds in nests.
- Major honeyeater migration back from north begins
- Magpie nesting and bombing can begin.

**Plants**

- Banksia *spinulosa*, Banksia *ericiifolia* nectar flow.
- Winter wattles flower: Sunshine Wattle, *Acacia terminalis*, first, then *Acacia longifolia*.
- Greenhood Orchids flower, e.g. *Pterostylis longiflora*, *Pterostylis grandiflora*.

**August:**
- Lady’s Fingers Orchids, *Caladenia catenata*, flower.
- Red bird pollinated flowers abundant - *Styphelia*, *Epacris reclinata*, some *Lambertia formosa*, *Grevillea acanthifolia*.
- *Dracophyllum secundum* secundum flowers until spring.
- *Boronia ledifolia* flowers.
- *Lilly Pilly* berries carpet rainforest floor.
- Foliage of *Dilwynnia retorta* and *Isopogon anemonifolius* turns red.

**Aquatic**

**August:**
- Trout spawn.
- Eels migrate from sea up Hawkesbury River to mountain streams (Aug-Sep). On upper Blue Mountains plateau only in Greaves Creek.
- Clam Shrimps (Conchostracans) dormant in pools as eggs.