



Welcome to the Summer edition of the Gecko. There has been some changes at the bushcare office as Lyndal has resigned from the team leader position and I was successful in the interview. For those who I have not met, my name is Erin and I am delighted to be in the coordinators role for such a thriving bushcare program. I have been working as a Bushcare Officer/Bush Regenerator with BM Council for two years and before that at Parramatta and Bankstown Councils and before that as a Bush regenerator contractor in the Sydney basin. I am delighted that Lyndal plans on sticking around for a while whilst we go through the process of recruiting for the Bushcare Officer position I just vacated.



Now for some news... Popes Glen has been awarded a grant of \$233,132 from the Environment Trust to be managed over six years. Well done to the group and the network who worked to support the application. On a sadder note John Penlington our webmaster has decided to retire (see article inside) but every cloud has a silver lining as Hugh Todd from Explorers Reserve Bushcare will be taking over the web mastery.

Try to keep cool and I will hopefully see you all at the picnic.

Erin



DATES TO NOTE

Saturday 9 February Leura Cascades, 9am—1pm. Join groups working in the Leura Falls Creek catchment for a morning of weeding, a paddle, a chat and a cuppa. Contact Erin Hall 4780 5528 or bush-care@bmcc.nsw.gov.au by 6 Feb.

Wednesday 13 February Bushcare Network Meeting, 6-8pm Lawson Library Meeting Room. All welcome. Light dinner provided RSVP by 8 Feb to Erin Hall 4780 5528 ehall@bmcc.nsw.gov.au

Thursday 7 March Valley View Swampcare, Blackheath 9am -3pm Come for the day or just an hour or two. A range of weeds to choose from - large or small. Lunch and morning tea provided. Book with Lyndal 4780 5528 or lsullivan@bmcc.nsw.gov.au by 28 Feb.

Wednesday 13 March Weeding with a View, morning event at Blackheath for the Great Grose Weed Walk (GGWW) Contact NPWS on 47873112 or vanessa.richardson@environment.nsw.gov.au

Saturday 16 March Popes Glen Remote 9am – 3pm. Come along to help consolidate the work done by the Popes Glen Bushcare group and contractors over the past 20 years. A joint BMCC/NPWS activity with morning tea provided. Contact Lyndal Sullivan 47805528 or lsullivan@bmcc.nsw.gov.au by 11 Mar.

Saturday 23 March Connected Waters Symposium, Presentations crayfish expert, updates on the Glenbrook Lagoon Cabomba control project and the Jamison Creek pollution incident.... and more. To register and for more information contact Amy St Lawrence on 4780 5553 or astlawrence@bmcc.nsw.gov.au. (see article inside)

Deadline for contributions for next Gecko 5th April 2013

More event dates on back page.....

On a cold Blackheath evening last October twelve bushcarers met near the Duckpond to learn about local frogs from Alan Lane. Unfortunately only 2 frogs were calling that night (the Common Eastern Froglet and the Eastern Pobblebonk).



Alan Lane

However Alan had some wonderful photos to show of the 10 or so most common frogs in the Blue Mountains – both mature frogs and tadpoles; and also played tape recordings of their calls. He also gave some interesting information on the behaviour of each species, including the differing lengths of their life cycles.

Alan has completed a Masters degree in frog ecology, researching frogs in the upper Blue Mountains area.

Below is a list of the frogs discussed and their calls from Alan.

Litoria latopalmata

Common Name	Scientific Name	Call
Common Eastern Froglet	<i>Crinia signifera</i>	A bit like a cricket: 'crik crik crik' Can be heard year round
Eastern Pobblebonk or Banjo Frog	<i>Limnodynastes dumerilii</i>	A resonant, musical 'kplunk'
Striped Marsh Frog	<i>Limnodynastes peronii</i>	A soft short call, like a tennis ball being hit: 'pok pok' or 'wuk wuk'. Can be heard year round
Laughing Frog or Emerald-spotted Tree Frog	<i>Litoria peronii</i>	A harsh, rattling, downward-inflected cackle or laugh: 'ackackackack'
Whirring Tree Frog	<i>Litoria verreauxii</i>	A very penetrating, upward inflected 'weep weep weep'
Blue Mountains Tree Frog	<i>Litoria citropa</i>	Sounds like a toy wooden horse galloping. Lots at Ingar Swamp, Kings Tableland.
Bleating Tree Frog	<i>Litoria dentate</i>	Bleating call, almost painful in intensity and pitch: a bit like cicadas
Broad-footed Tree Frog	<i>Litoria latopalmata</i>	Rapid 'yapping' or 'quacking' Calls from the edges of water bodies eg. dams
Lesueur's Frog	<i>Litoria lesueuri</i>	Soft, purring call from near water. Common around rocky, flowing streams eg. Govett's Creek

Thanks John



It is with much sadness that I have to write that John Penlington our fantastic web master has decided to retire. John has done years of work in keeping www.weedsbluemountains.org.au up to date and looking good. He has volunteered his time and worked professionally to make the weeds website the great asset that it is today. He worked in conjunction with Barbara Harley with the weeds booklet which is something the bushcare program has to be proud of. I personally will miss John's way of politely opening my eyes to all the wonderful world of the internet has to offer. For those who do not know John it is fitting that you "google John Penlington Blue Mountains" and see some of his other projects. Here is a photo borrowed from the World Wide Web taken by the Australian newspaper.

Thanks John for all your hard work we will miss you!



FIREWEED OR FIREWEED GROUNDSEL – WEED OR NATIVE?

The Cross Street Bushcare Group's October newsletter featured an excellent article on the difference between the native and weed Senecios, compiled by Steve Barrett. This is an extract of that article.

The weedy Fireweed (*Senecio madagascariensis*) is often confused with the native locally found Fireweed Groundsel (*Senecio linearifolius*). Hopefully, the following information will reduce this confusion.

Differences between native and introduced species: The native species is up to 900mm higher than the weed species. Also the petals of the native species are shorter and fewer (8 or less compared to 13) with much larger leaves that are conspicuously veined on the upper surface and the margins are fine, regularly toothed and recurved. The differences in the leaves are apparent in seedlings as well as mature plants.



Senecio madagascariensis
Fireweed

Introduced Fireweed (*Senecio madagascariensis*)

Fireweed is a highly invasive and opportunistic weed native to SE Africa.

Impacts: Fireweed is able to grow on most soil types and in all aspects. It forms a persistent seed bank if not controlled before flowering and can rapidly take over cleared areas. One plant is capable of producing 5 000 to 30 000 seeds in one season depending on conditions.

Identification: Fireweed is a daisy-like plant that grows from 100 to 600 mm high. It is usually a low, heavily branched, annual or short-lived perennial plant.

Leaves: Generally bright green, fleshy and narrow, 20–70 mm long, alternately arranged on the stem, with serrated, entire or lobed margins. Broader leaves usually clasp around the stem.

Flowers: Small, yellow and daisy-like, flowers are 10–20 mm in diameter and arranged in clusters at the end of each branch. Each flower has 13 petals and 21 bracts forming the 'cup' under the flower.

Seeds and dispersal: Seeds are



Fireweed

small (1–3 mm long), light and slender. Most seed will fall within 5 metres of the parent plant but some seed can be spread to greater distances in updrafts and whirlwinds.

Native Fireweed Groundsel (*Senecio linearifolius*)



Native Fireweed

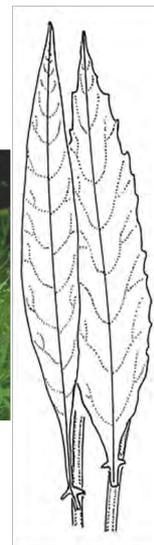
Description: Perennial herb or shrub 500–1500 mm high, stems few-branched, glabrous (smooth and hairless) to cobwebby.

Leaves: variable, either linear or elliptic. Mostly linear (long and narrow with more or less parallel sides) to lanceolate (lance shaped usually broadest in the lowest half) or narrow-elliptic (oval and flat, broadest at middle and tapered at ends). 60–150 mm long and 5–15 mm wide with margins ± recurved (curved down) and entire (smooth margins) to , lower surface mostly cobwebby, base tapered and petiole (stalk)

Flowers: Throughout year. The structures supporting the flowers arise at different points on the stem but, the flowers are at the same level resulting in a flat top arrangement. There are numerous cylindrical, 2–3 mm diameter flower heads that are glabrous except at the apex. The seed is compressed, 2–2.5 mm long, brown, glabrous with a; 5–8 mm long pappus.



Native Fireweed



all photos are from plantnet



HOLLY TREATMENT METHODS - With Some Surprising Results

Most bush regenerators consider Holly to be one of those weeds where the results of treatment are often inconsistent. Some of the reasons for this is believed to be: the time of year, technique and/or plant size. The RSPCA Landcare group decided to test these theories.

The trial found that a 100% kill rate can be achieved at any time of year as long as the chosen techniques is done 'properly'.

The overall effectiveness of the trial was 96.5%, with a reason found for the failure of the each of the 8 plants that were still alive. Further monitoring will be required over the next year, particularly for those plots where treatment has been most recent. 230 Holly plants were treated in different seasons with the oldest results being 2 years after treatment and the shortest, just one year.

In October 2010 the group, faced with a large patch of holly, decided to test what worked best. 5 plots were treated over a 15 month period – covering Spring, Summer, Winter and Autumn. A range of plants sizes was treated. In total 275 plants were treated and tagged however only 230 plants were found and able to be assessed - some markers got lost and other plants and markers were totally covered by fallen trees after the windstorm of July 2011.

The herbicide used throughout was undiluted Glyphosate. The 3 techniques used were – cut and paint, scrape and paint and drill and fill with herbicide.



The team: Francis Scarano, Barbara Baird, Rosemary & Gary Madeley.



DISCUSSION OF RESULTS

CUT AND PAINT (C&P)

Out of the 92 plants treated by C&P, only 1 was not effective (98.9 % success). This was a plant that had been cut above the ground (approx 100 mm), then 4 shoots had sprouted below the cut. It had been treated in summer (Jan 2011)

It is worth noting that of those 40mm or greater at the base, the roots of many were also scraped & painted (5 out of the 22). A very small sample of small plants were treated by C & P (stems less than 10mm).

SCRAPE AND PAINT (S&P)

Out of the 75 plants treated by S&P, 4 were not effective (94.6% success).

3 of the 4 unsuccessful treatments were on multi-stemmed plants where not all stems had been scraped; the other was where the plant was large (65mm diameter) and the scrape was less than 1/4 of the stem length. 2 out of the 4 unsuccessful ones were plants with a base diameter greater than 50 mm at the base.

DRILL & INJECT

Of the 63 plants treated by drilling and injecting neat herbicide, 3 were not effective (95.2% success). These were all plants with multiple stems where only the main stem had been treated, and all in May. With all other multiple stem plants, every stem was treated, often using S&P method on smaller suckers.

The technique used was to drill holes at about 40 mm spacing in a ring around the base. Only 1 plant was treated by drilling that had a base diameter less than 25 mm, so it is difficult to come to any conclusions as to the effectiveness of drilling smaller plants. However it is possible to use a smaller size drill bit.

This article is continued over the page.....





CONCLUSION

It is too early to be certain of the results as Holly often appears dead but can resprout years after treatment. The sample size is also relatively small for the results to be conclusive on the best technique to use for each size plant in each season.

However it gives an indication that:

- Holly can be treated effectively in all seasons
- The cut and paint method is effective if cuts are no higher than ground level
- Plants with multiple stems or suckers can be treated effectively by a combination of Drill & Inject and Scrape and Paint techniques, as long as all stems/suckers are treated.

This result is questioned by bush regenerators who have worked at Mt Wilson on holly over many years. Perhaps there is another critical factor? Does climate, or soil type or some other factor influence the different results observed between Mt Wilson and Katoomba? Further monitoring at the Katoomba site is needed as well as further trials in different locations. Below is a table recording the stem size, the techniques used and the kill rate recorded.

Full details of the results of each technique used during each season is available from the Bushcare Office, or contact Lyndal for further information.

SUMMARY OF SAMPLE AND RESULTS						
Technique	Size of Holly Stem in mm				total	%
	0-9	10-24	25-39	> 40		
C&P sample	9	37	24	22	92	
C & P no. Killed	9	36	24	22	91	98.90%
S&P sample	13	36	14	12	75	
S&P no. Killed	13	34	13	11	71	94.60%
Drill sample	13	36	14	12	75	
Drill no. Killed	13	34	13	11	71	94.60%
Total sample	22	74	45	89	230	
No. killed	22	71	42	87	222	96.52%
Success as %	100.00 %	95.95 %	93.33 %	97.75 %		





Have Your Say On The Future of Waste in the Mountains

Council has begun a major review of its Waste Strategy for the City of the Blue Mountains.

In March and April we will be seeking YOUR opinion on the best solutions for managing waste.

Why it this important for Bushcare Volunteers to participate?

New solutions are required to sustainably manage our waste in ways that meet the long term needs of the community and our unique World Heritage environment. The new waste strategy will lay the roadmap for waste management in the City for the long term and your feedback will help us build that map.

How: During the strategy's development, Council will be carrying out in-depth research and community consultation to identify the most effective and sustainable options. Consultation will be through independently facilitated sessions, held during March and April 2013 to gather the communities' feedback to inform the new strategy.

Next Steps: Look out for community notices next month to get involved or email events@straight-talk.com.au with the subject "**BM Waste Strategy Sessions**" for your invite to the community sessions.



BIRDS OF THE LOWER BLUE MOUNTAINS



Last November, members of the eight groups that work between Blaxland and Lapstone enjoyed an early morning Bird Walk at Darks Common with two local experts.

Jill Dark and Dick Turner generously shared their vast knowledge of birds and assisted all with identifying the 24 whose calls were heard, and the 11 spotted. Much interesting information about bird behaviour and habitat was also shared.



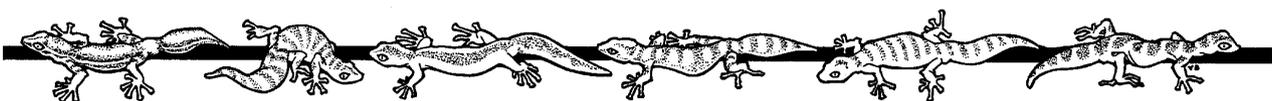
These birds were heard only:

Satin Bower bird
Rainbow Lorriquet
Kookaburra
Eastern Rosella
Galah
Yellow faced honeyeater
Channel Bill Cuckoo
Magpie
Red wattle bird
Fantail cuckoo
Spotted pardalote
Brown headed honeyeater
Pigeon – feral
Gallus gallus domesticus
Noisy friarbird

These birds were also sighted:

Noisy miner
Grey butcher bird
Olive- backed Oriole
Common Bronze wing
Butcher bird
White throated tree creeper
Yellow robin
Yellow faced honeyeater
Yellow tufted honeyeater
Sulfur crested cockatoo
Peregrine falcon

Here are some of the bushcarers with Dick and Jill spotting birds on the edge of Glenbrook Gorge.



Australia has one of the most diverse ranges of fresh water crayfish species on the planet, with previously undiscovered or undescribed species still being found. The Australian Crayfish Project conducts surveys all over the country to increase understanding of freshwater crayfish species, distributions and habitats. The project is supported by state and federal government departments and involves volunteers as well as researchers from the Australian Museum, Edith Cowan University, Griffith University, Carnegie Museum (USA), Queensland Museum and James Cook University.



Giant Spiny Crayfish (*Euastacus spinifer*)

Blue Mountains City Council's *Connected Waters Symposium* (to be held on 23rd March 2013) will feature a talk by the Australian Crayfish Project leader Rob McCormack. Rob has written several books about freshwater crayfish, including 'A Guide to Australia's Spiny Freshwater Crayfish', published by CSIRO Publishing in 2012. Rob will be talking about freshwater crayfish in Australia and will share his knowledge about the species found in the Blue Mountains. Registrations essential, contact Amy St Lawrence, on 4780 5553

astlawrence@bmcc.nsw.gov.au

PLAGUE SOLDIER BEETLES

During December and January you may have noticed swarms of small green beetles flying about or large groups crawling over vegetation (and each other) at your Bushcare or Landcare site. Some research indicates that they are Plague Soldier Beetles (*Chauliognathus lugubris*).

These native beetles are found in many parts of Australia in urban gardens/parks, heath, woodland and forest areas, generally from Spring through to Autumn. They appear to have adopted their common name from their habit of forming large mating swarms, rather than any negative implications associated with plagues.



Plague Soldier Beetles have soft, elongated and flat bodies (up to 15 mm long), with olive-green metallic wings, mostly covering bright-orange abdomens. The legs, head and antennae are all black. The bright colour of their abdomens is quite visible when they are in flight and can be a warning, as they can release a white viscous fluid from their glands that can repel any predators. The beetle also exudes the same fluid in a wax form to protect its eggs from infection. The CSIROnewsblog.com website (8/11/2012) reports on this fluid:

Our researchers have recently found the genes that give the chemical its anti-microbial and anti-cancer properties, and were able to replicate the synthesis in the lab. This may one day lead to the development of new anti-biotic and anti-cancer related products. For more information refer to this link (<http://www.csiro.au/Portals/Media/Gene-find-turns-soldier-beetle-defence-into-biotech-opportunity.aspx>)

The larvae live in the soil, feeding on other soft-bodied invertebrates. The adult beetles feed on pollen and nectar.

The swarming action is for reasons of mating, not devouring garden plants, as some people often fear. The swarms can be in such large numbers that stems and limbs of weaker plants can often be weighed down. Scientists have found that in one swarm, 92% of the beetles were copulating. Following mating, the beetle swarm often disperses.

Source Information:

<http://csironewsblog.com/2012/11/08/insect-of-the-week-the-plague-soldier-beetle-isnt-nearly-as-bad-as-it-sounds/>
<http://museumvictoria.com.au/about/mv-blog/jan-2012/plague-soldier-beetles/>
<http://australianmuseum.net.au/Plague-Soldier-Beetle/>



**You are invited to the
19th Annual Bushcare/Landcare BBQ
Megalong Reserve 12pm Saturday, 13 April 2013**



Music, Children's activities, Awards and prizes,
Delicious Vegetarian and Carnivorous BBQ

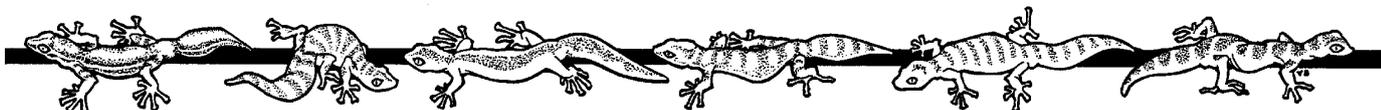
Please RSVP by Monday 8th April to the Bushcare office 4780 5623 or bushcare@bmcc.nsw.gov.au

6-8 April Govetts Creek, Grose Valley. Three day walking, weeding and camping. Contact Vanessa at NPWS on 47873112 vanessa.richardson@environment.nsw.gov.au

Friday 26 April Kittyhawk Swampcare, Wentworth Falls 9am-3pm. It is time to follow up on the weeds in the Kittyhawk Swamp, home to the Giant Dragonfly and the Blue Mountains Water Skink. Lunch and morning tea provided. Book with Lyndal 4780 5528 or lsullivan@bmcc.nsw.gov.au by 22 April.

3rd - 5rd May Capertee Valley Tree Planting with Capertee Valley Regent Honeyeater Recovery Group. Accommodation or camping can be arranged register with Pixie Maloney on (02) 9647 1033 or southernsw@birdlife.org.au

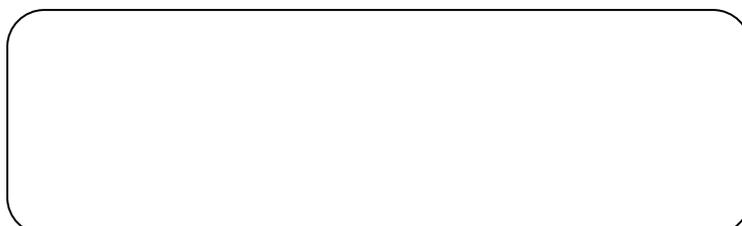
Your Newsletter: This newsletter is compiled by Erin Hall (assisted by Sharon Huxley) from Blue Mountains City Council with contributions from volunteers (with special thanks to Barbara Harley) and Council's Environmental Management Staff. It is sent to Bushcare & Landcare volunteers and other interested people. Contributions and suggestions are always welcome, as are requests for alterations to the mailing list. Contact: Bushcare, Blue Mountains City Council,



If undelivered please return to
Locked Bag 1005 Katoomba NSW 2780



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REVIEW OF COUNCIL'S COMMUNITY CONSERVATION PROGRAM

Volunteers make an enormous contribution to the protection and conservation of our City's natural environment. Much of this effort is made through formal volunteer programs such as Bushcare, Landcare, Streamwatch, Trackcare and Bush Backyards. This range of community stewardship partnerships make up Council's Community Conservation program.

Blue Mountains City Council provides support and co-ordination to these programs, although Council's approach has not really changed or been reviewed since the 1990s.

Council wants to ensure that the investment it makes in support and co-ordination is actually responsive and helpful to our valued volunteers, and results in the best possible community and conservation outcomes.

In addition, the Blue Mountains Weed Management Strategy 2010, foreshadows a review of the Bushcare/ Landcare program to address limited resources and increasing community demand for the formation of new groups. Council's other community conservation programs also confront similar issues.

This review is not about reducing support. It is about looking at how that support is provided to achieve the best possible outcomes. The review will consider a range of models for managing volunteer programs and may result in significant changes to the way current programs are delivered.

Through the review, Council wants to open discussion with community conservation groups about issues such as:

what is working ?

what could work better ?

what needs changing ?

are there any new or emerging issues which the current approach does not address ?

what are the contemporary needs of community conservation volunteers ?

All volunteers in Community Conservation programs will be notified of the review in early February 2013, providing more detail and an invitation to participate in the community consultation.

The outcome of this consultation process will then be used as the basis for a draft Community Conservation Program Strategy which will be submitted to the Council for consideration in October 2013, with further consultation at this point.

Public comments will be considered in reviewing the draft strategy before a final strategy is submitted to Council for approval in early 2014.



bush
backyards



Streamwatch



COUNCIL CONTACTS: Linda Thomas, Community Weeds Officer, 4780 5612 , lthomas@bmcc.nsw.gov.au