



Welcome to the Spring edition of Gecko.

Now is the time to treat montbretia. From November to April many people have been asking how to make montbretia wipers. Many thanks to Barbara Harley for producing the very useful lift out in this edition and preparing another for the next edition on how to use your montbretia wiper. Both 'how to' sheets will be on the website soon.

Volunteers who have been involved before 2000 will remember long debates about Bushcare policy and procedures issues. The Bushcare Procedures Manual was adopted by Council in October 2002, so it is time for a review. All groups are being asked to make suggestions, and the Bushcare Network will also discuss ideas at its next meeting on 26th November. We look forward to hearing your suggestions.



Lyndal Sullivan
Bushcare Team Leader

DATES TO NOTE

Details of listed events are contained in this newsletter. Unless otherwise specified the contact for all events is Lyndal Sullivan on 47805528 or email lsullivan@bmcc.nsw.gov.au

Saturday-Sunday 8th-9th November Sycamore Weedout Weekend at Jenolan Cave
Contact: tkidd@bmcc.nsw.gov.au or 0423 527 740. Accom, food, training and tools supplied.

Saturday 8th November Remote Bushcare on Sassafras Creek, Springwood - full day

Tuesday 11th November Popes Glen Blackheath 9am – 3pm
A joint activity of NPWS/Popes Glen Bushcare/BMCC as part of the Great Grose Weed Walk.
Contact: Monica.Nugent@environment.nsw.gov.au or 4787 3112

Saturday 15th November Mt Victoria – headwaters of Grose River 8.30am – 4pm
A joint NPWS/BMCC Great Grose Weed Walk event with local bushwalking clubs.
Contact: Monica.Nugent@environment.nsw.gov.au or 4787 3112

Friday November 21st 9-12pm Swampcare event with Hester Creek Landcare group, Leura
Contact: Michael Hensen mhensen@bmcc.nsw.gov.au or 4780 5471.

Wednesday November 26th 6 pm Bushcare Network meeting at MCRN room in Lawson library.
RSVP for agenda and catering – light dinner provided. Note new venue.

Saturday 29th November - Stream and Swamp Processes Workshop - *Bookings essential*
Contact: Amy StLawrence astlawrence@bmcc.nsw.gov.au or 4780 5553

Friday 5th December 8.15pm-10pm Bushcare Biodiversity Workshop - Frogs of the Upper Blue Mountains with Alan Lane at Memorial Park, Blackheath. *Bookings essential.*

Saturday 6th December Bonnie Doon Weedout, Katoomba (9 am – 4pm)
An event above the southern escarpment to protect the Dwarf Mountain Pine (now *Pherosphaera fitzgeraldii*). Join in the day to make a start on the holly, privet, broom and cherry laurel invading the bushland. Contact: Michael Hensen mhensen@bmcc.nsw.gov.au or 4780 5471.

Saturday 13th December – Lower Mountains Bushcare & Landcare Groups Annual Dinner at the Lapstone Hotel from 6:30pm. You are welcome to come and meet other people involved with Bushcare & Landcare in the lower mountains. RSVP to Nathan Summers 4780 5623.

Saturday 31st January 2009 Lower Mountains Remote Bushcare all day event. Exact location will depend on progress made in November

ADVANCE NOTICE - Bushcare Picnic Saturday 30th May 2009

Remote Area Bushcare

On Saturday 30th August an intrepid band of 10 remote area bushcarers descended from North Katoomba to Katoomba Creek for a day's leisurely broom-spotting and eradication. Under the guidance of our trusty and fearless leader, Lyndal, we scoured an area along the creek for any broom seedlings that may have eluded previous weeders.

There has been an enormous amount of work done in this area since the 2002 bushfires, when a vast sea of broom seedlings appeared. Though we didn't find huge numbers of seedlings on this visit, (a testament to the thoroughness of the work already done), it was satisfying to know that the seedlings we did destroy have prevented the production of many thousands of new seeds.

Not only did we walk into a beautiful area not normally visited, we had an enjoyable day in great company and, most importantly, contributed to the further demise of a very nasty weed.

Kathy Chapman



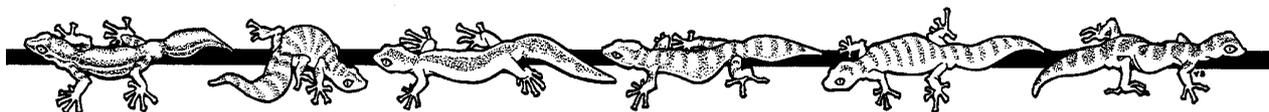
Another remote bushcare trip is planned for Saturday 8th November on Sassafras Creek, Springwood. This will involve a walk down Sassafras Gully Track to the creek then weeding along the creek, primarily for mistflower. This event is to extend the work of the Beefarm Rd Landcare Group by working downstream of their area, and help protect Sassafras Creek. Contact Lyndal Sullivan if you are interested in this trip or any future trips [47805528 or email lsullivan@bmcc.nsw.gov.au]

Stream and swamp processes workshop – Saturday 29th November

Different types of streams exhibit varying responses to catchment disturbance – in the Blue Mountains, for example, the bedrock-dominated “headwater” styles tend to be quite resilient to ‘physical’ degradation, whereas other styles such as the “valley fill sand” swamps are more fragile and prone to channelisation. This workshop will look at different stream types and geomorphic processes in the Blue Mountains, with an emphasis on how to recognise condition and recovery potential of streams and swamps and what types of interventions may be suitable. The day will be largely field-based and participants will require a reasonable level of fitness. Bookings essential - contact Amy St Lawrence on (02) 4780 5553 or email astlawrence@bmcc.nsw.gov.au



Channelised fill at Maple Grove, Katoomba. The dark organic ‘swamp’ layer is clearly visible under a layer of sediment, exposed by subsequent channel incision.



A Field Guide for Bush Regenerators; Protecting and Conserving Aboriginal Landscapes

A Field Guide was produced in May this year on 'Protecting and Conserving Aboriginal Landscapes' by the Sydney Metropolitan Catchment Management Authority.

This is a useful guide for us here in the Blue Mountains. It is designed for Bushcare volunteers, professional bush regenerators and land managers. It contains information on:

- Types of Local Aboriginal Places, objects and values that can be found at bushland sites
- Legal obligations
- What to do if you suspect an Aboriginal site, object or cultural value on your bush regeneration site
- Where to find additional information

It also contains a useful explanation of Aboriginal landscapes, and how this contrasts with earlier archaeological viewpoints and current legislation.

' The Aboriginal landscape is everything in a place, including the interconnectedness of the plants, rocks, creek/water, animals and landforms. Aboriginal landscapes have cultural importance – some places within the landscape context will be of higher importance than others, but the whole landscape is just as important as all places are interconnected not simply isolated sites.'

' The Aboriginal perspective that the landscape is important as a whole contrasts with earlier archaeological viewpoints, where Aboriginal sites were usually defined as a distinct place that contained physical evidence of Aboriginal occupation and use of an area. Most current legislation still reflects this earlier viewpoint.' (p 1)

Each Bushcare Officer has a copy of this very informative Field Guide (produced on waterproof paper too!). More copies can be obtained by contacting Margaret Bottrell on 9895 7458 or margaret.bottrell@cma.nsw.gov.au

BIRDS IN BACKYARDS

Birds in Backyards is a research, education and conservation programme, focusing on birds and the urban environment. The programme was developed in response to the reduction of bird species living in built up areas, the rapid expansion of these areas and the subsequent loss of habitat. The programme is a joint initiative of *Birds Australia* and the *Australian Museum*.

The programme provides:

- information about Australian birds and their habitats.
- details on how to encourage birds and other wildlife into your garden.
- an opportunity to contribute to the knowledge of urban birds by undertaking bird surveys in your garden.

The information gained from the bird surveys will be used to promote habitat for urban birds.

If you wish to be involved, visit the website of *Birds in Backyards* at www.birdsinbackyards.net (or if you don't have access to the internet, try your local library, for assistance).



Gang Gang feeding on local native vegetation in Wentworth Falls backyard (photo Lachlan Garland) May 2007

BLUE MOUNTAINS BIRD OBSERVERS

Blue Mountains Bird Observers is a local community group open to all who are interested in the bird life of the Blue Mountains. The group has more than a hundred members, including some expert bird watchers and bird photographers, from whom you can learn.

A popular activity of the group is its field trips, which include short bird-watching walks on the many bush tracks in the Blue Mountains, as well as to other areas. In addition to the walks, the group holds quarterly meetings, which include a talk, slide show or presentation with a birding theme, as well as a social afternoon tea.

New members are always welcome

Further information is available on their website at

www.bmbirding.com.au/bmbo.

For enquiries, please contact Chris Todd on 4751 3482 or bmbo@bmbirding.com.au.





Was it the Bradley sisters or Albert and Margaret Morris? The answer depends on your definition of bush regeneration.

If your definition of bush regeneration focuses on regenerating weed infested bushland, you would say that Joan and Eileen Bradley were the pioneers of bush regeneration in NSW. This is the view put by Robin Buchanan who is the author of the key text on the subject (Buchanan 1989, p 6). In 1971 Joan Bradley published *Bush Regeneration* in which she outlined the method developed with her sister, which was that controlled weeding **without replanting** was the best method to bring back the bush. These methods were developed over many years of trial and error, from the early 1960s. An earlier 1967 publication by both sisters demonstrates the development of their techniques.

The travelling Powerhouse Museum's exhibition *Greening the Silver City*, claimed that Albert Morris and the Barrier Field Naturalists were the pioneers of bush regeneration in Australia. About 20 Blue Mountains Bushcare volunteers and staff attended the opening of the exhibition at Mt Tomah in May.

Whilst the exhibition itself did not present any detailed evidence of the Morris bush regeneration techniques, it did provoke much discussion. Barbara

Briggs of the Royal Botanic Gardens tracked down a paper which was evidence of the bush regeneration approach taken at Broken Hill (Pidgeon, I.M. & Ashby E 1940)

This paper by two Botanists from the University of Sydney, Ilma Pidgeon and Eric Ashby was presented to the Linnean Society in 1940 on the regeneration occurring in Broken Hill as a result of the work of Albert and Margaret Morris. It is a statistical analysis of the regeneration following protection from grazing, and verifies that areas were deliberately fenced to exclude rabbits and grazing stock in order to allow native plants to regenerate.

A paper written by Margaret Morris describes the situation in Broken Hill as that of a cleared landscape, with serious soil erosion as the result of timber cutting then heavy grazing by rabbits, goats and stock (Morris, 1939). She outlines the history of Albert's ideas and their implementation, including the extensive planting, and says that "the greatest thing of all was that the fencing of the blocks demonstrated what Albert Morris had maintained, namely, that with protection from stock the country would 'come back'".

The Australian Association of Bush

Regenerators (AABR) defines Bush Regeneration as "the practice of restoring bushland by focusing on the reinstating and reinforcing of the systems ongoing natural regeneration processes."

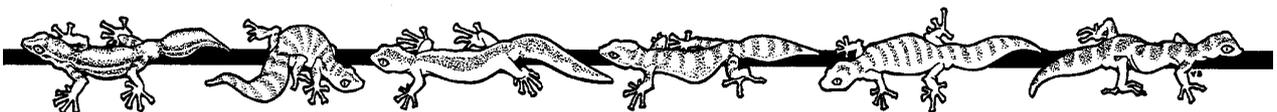
In conclusion, are they not all founders? – the Morris for cleared landscape regeneration and the Bradleys for weed infested bushland regeneration. It is interesting to note that they all relied heavily on planting when they started their work, and later advocated natural regeneration as the best approach.

References

Bradley Joan (1971) *Bush Regeneration*
 Buchanan, Robin 1989 *Bush Regeneration; Recovering Australian Landscapes* TAFE NSW Sydney, Australia
 Morris, M (1939) *Plant Regeneration in the Broken Hill District* Australian Journal of Science ii, p43-48, 1939.
 Pidgeon, I.M. & Ashby E (1940) *Studies in applied ecology. A statistical analysis of regeneration following protection from grazing.* Proceedings of the Linnean Society of New South Wales 65: 123-143.



Members of the Bushcare contingent with a display of the Bradley Sisters Tool board at the Silver City Exhibition Opening on May 2008 (photo Jan Allen)



The coming of Mirror Bush to the Blue Mountains



Gaining height, this cluster of Mirror Bushes growing alongside Blue Mountains Ash (*E. oreades*) in Katoomba bushland.

Coprosma repens (Mirror bush, Taupata, New Zealand Laurel) is establishing in the Blue Mountains with the help of ornamental gardening and its' bird dispersed fruit.

Mirror bush is planted for its shiny rounded leaves and has small inconspicuous flowers, giving rise to a 1 cm long orange-red fruit. These fruit are probably dispersed by the introduced red-whiskered bulbul and native silvereye and Lewin's honeyeater.

It has been considered an invader of coastal beaches and headlands in NSW, rather than bushland away from the sea. The invasion is becoming more obvious as the cohorts of successful seedlings are now mature and reproducing themselves, greatly increasing the available fruit to tempt some of our smaller feathered friends and pollen availability to fertilize more flowers.

Luckily Mirror Bush does look like a weed and unlike its two close relatives that are native in the Blue Mountains; *C. quadrifida* (Prickly Current Bush) lives in rainforest and has much smaller crowded leaves and often spinescent branches, *C. hirtella* (Rough Coprosma, Coffee-berry) is a tableland species only likely to be found from Blackheath area westward in our area.

Unluckily on the north side of the Grose Valley around Mount Tomah, two other New Zealand Coprosmas have jumped the Garden's fence and are less obvious as the spread amongst the Brown Barrel (*Eucalyptus fastigata*) dominated forest. **C. robusta* (Karamu) does look similar to the native *C. hirtella*, though it gets larger (to 6m recorded in Blue Mountains) and has small raised lumps on the upper leaf surface. It is interesting to note that the other *Coprosma* invading around Mount Tomah turns out to be a hybrid (**C. x cunninghamii*) whose parents are planted nearby. As it was mature and laden with fruit when found, perhaps by now it is swarming? **C. x cunninghamii* forms extensive hybrid swarms in its native New Zealand.

Clive Heywood Barker
Blue Mountains Conservation Society

Phytophthora cinnamomi

In September, Dr Edward Liew of the Sydney Royal Botanic Gardens ran a series of workshops for Council on the management of *Phytophthora cinnamomi* for staff, bushcare volunteers and other agencies. **32 bushcare volunteers attended the sessions and contributed to a lively discussion.**

What is *Phytophthora cinnamomi* ?

It is a microscopic organism that lives in soils and plant roots. It is a pathogen that infects the root tissue of plants and causes the root to rot

Secondary symptoms include dieback of major branches, yellowing of leaves and stunted growth. Susceptible plants may die suddenly within weeks, whereas tolerant species may show some wilting of leaves then recover as conditions become less favourable for the pathogen.

How does *Phytophthora cinnamomi* spread ?

Phytophthora cinnamomi thrives in areas with mild temperatures and rainfall above 600mm pa. Spores can spread a few metres a year through the soil or by root-to-root contact. Rapid spread is caused by the movement of infected soil or plant root material. This happens with earthworks, on vehicle tyres, by bike riding, horse riding, bushwalking, dumping of garden waste and also potentially on bush generators' tools.

What can we do about it ?

There are no known methods to eradicate *Phytophthora cinnamomi* from a site once it is infested. However, we can help to stop its spread into uninfested bushland.

If you don't know whether bushland areas are infected, assume it is clean and take precautions to ensure you are not introducing the disease (adopt hygiene protocols).

If an area shows dieback symptoms notify your Bushcare Officer to see if it needs to be tested. As there are other causes of dieback, it is necessary to ensure the cause isn't related to stormwater runoff, anaerobic conditions, nutrients, soil toxicity, drought stress or some other problem. Council is looking into developing a capacity to undertake soil testing. At this stage, it is undertaken by the Royal Botanic Gardens in Sydney.

If an infected site is identified, access to the area should be restricted and strict hygiene protocols adopted. There is a chemical which can be applied to protect susceptible species.

Hygiene Protocols

Bushcare Officers have started to adopt some basic hygiene regimes whilst seeking more information from the experts and ideas from volunteers.

Basic hygiene protocol for trial adoption:

- Keep vehicles to designated roads and parking areas
- Avoid working or walking in wet and muddy areas
- At the start and finish of a Bushcare session "dry brush" all foot wear using a brush then spray with a mixture of methylated spirits (70%) and water (30%)
- At the end of a Bushcare session, tools and mats are to be either cleaned on site or packed in containers/bags to take to an offsite "wash down" area. Clean by dry brushing or washing off soil, then spray with the methylated spirit/water mix. Soil should also be removed from inside tool pouches.
- Gloves should be washed after each site, before re-use.

More information ?

A detailed report on *Best Practice Management Guidelines* by the Botanic Gardens Trust was distributed at the workshop. Hard copies are available from the Bushcare Office.

TALL STORIES - The biggest Turkey Rhubarb?



Vicki Cottee of the Zora's Creek Landcare Group at Glenbrook showing just how big Turkey Rhubarb can get. Vicki spent some time digging up this tuber from beside Zora's Creek. It measured 110 mm in length.

HAS YOUR GROUP UNEARTHED A LARGER TUBER? IF SO, SEND YOUR PHOTO IN FOR THE NEXT GECKO.

‘Whopper-Weeders’

Many of us have grown up with the principles and practices of European gardening traditions. We've been accustomed to using big gardening tools, turning over soil, creating lots of green waste. These practices are the antithesis of bush regeneration, but we all, volunteers, professionals and those of us who have been both at various times, occasionally enjoy the satisfaction of removing those big woody weeds and looking back at the difference we've made.

In acknowledgement of this very human trait, your Bushcare Officers are wondering whether the idea of 'whopper-weeding' would appeal to those of you who really only want to handle the big woodies. We are looking to create a list of volunteers to notify when we come across a site with lots of 'primary' weeds, given that many sites have run out of them. If you would like to be on the list, please contact Lyndal Sullivan on 4780 5528.



The Minnehaha Bushcare Group has recently taken on a field of flowering *Erica lusitanica* – Spanish/Portuguese Heath, in North Katoomba. We will be working there at the end of October as part of the Great Grose Weed Walk. By the time this issue of the Gecko is distributed that time will have passed, but there's plenty for the next few months. And there will be other sites.

Jill Rattray

Fred Lyford

Your Newsletter: This newsletter is compiled by Lyndal Sullivan (assisted by Gerard Borg) from Blue Mountains City Council with contributions from Council's Environmental Management Staff and members of the Bushcare Network. It is sent to Bushcare volunteers and other interested people. Contributions and suggestions are always welcome, as are requests for alterations to the mailing list. We can be contacted at Blue Mountains City Council, Locked Bag 1005, Katoomba NSW 2780.



If undelivered please return to
Locked Bag 1005 Katoomba NSW 2780



POSTAGE PAID AUSTRALIA

