



"Nature Conservation Saves for Tomorrow"

"The extinction of a species, each one a pilgrim of four billion years of evolution, is an irreversible loss. The ending of the lines of so many creatures with whom we have travelled this far is an occasion of profound sorrow and grief. Death can be accepted and to some degree transformed. But the loss of lineages and all their future young is not something to accept. It must be rigorously and intelligently resisted."

American poet and environmental activist Gary Snyder, from the essay 'Survival and Sacrament' contained in a collection of Snyder's essays titled *The Practice of the Wild*, Shoemaker & Hoard, 1990.

SUNSET GATHERING

THURSDAY 14 FEBRUARY 2019

(6.30 PM FOR 7 PM START)

CONSERVATION HUT, WENTWORTH FALLS

Members, friends and supporters are invited to join us to meet like-minded people and watch the sun setting over the southern Blue Mountains. If perchance it is cloudy or even raining, seen from the shelter of the Conservation Hut, the national park has its own beauty no matter what the weather and there will be friendship, entertainment and supper inside The Hut.

If you are a new member, you can meet other members of the Society. If you are not already a member, you might wonder why? Some members of our management committee will be there to answer your questions about what the Society has been doing this year. With our AGM coming up at the end of March, you might want to find out how you are able to help. There is often need for volunteers to help on the management committee, sub committees and at events.

Margaret and Bob Fagan will sing some songs. They are the founder members of Australia's pre-eminent folk music family 'The Fagans' and, as a duo, Margaret's pure voice and Bob's

singing accompaniment and superb guitar playing combine to ensure their popularity both here and abroad. Brendan Doyle will recite poetry. Brendan is a long-time member of the Conservation Society and recites at Blackheath's Rhodo Day "poets' breakfast" and other poetry venues in the mountains.

Tea, coffee and light refreshments will be provided. The Conservation Hut is situated in Blue Mountains National Park at the end of Fletcher Street, Wentworth Falls. Enquiries: Phoebe Coster, Events Coordinator, phoebe@coster.com.au



Protect Our National Parks Rally



**24 February 2pm
Mechanics Institute
GWH, Lawson**

Come to a rally to protect National Parks! Show our political representatives and candidates in the coming federal and state elections how much we care about our national parks!

Read more on page 2.

NURSERY NEWS

The hot wet summer has produced luxuriant growth in our young native plants. Many are ready to jump out of their little pots and be planted in your gardens! Please come to the markets and choose your plants.

The particularly gorgeous *Mirbelia rubiifolia* and *M. platylobioides* are ideal rockery plants. We also have plenty of native grasses and sedges for damper areas or edging driveways.

Our volunteers will be at the Blackheath Community Market (1st Sunday of the month, 9am to 1pm) and Lawson Magpie Market (3rd Sunday of the month, 9am to 2pm).

DATE FOR YOUR DIARY:

THURSDAY, 28 MARCH 2019, 7 PM

Blue Mountains Conservation Society
Annual General Meeting
at the Conservation Hut, Wentworth Falls

NSW State Election in March and a Federal Election in May

Are you enrolled to vote?

How to check your enrolment:

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

"Hut News", the newsletter of
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Koala warning signs: One of the closest koala warning signs to the Blue Mountains is here on busy Silverdale Road at Wallacia. Will we see koala warning signs in the Blue Mountains Local Government Area, following the Gazette's October 2018 report of several sightings near Hawkesbury Road, Winmalee?

RALLY TO PROTECT NATIONAL PARKS! **2pm Sunday 24 February**

Lawson Mechanics Institute, Great Western Highway

National Parks face threats from:

- Fast growing visitor numbers
- Inadequate government funding
- Eco-unfriendly development proposals
- Invasive species
- Much more widespread horse riding
- Joy flights and unpoliced drone use
- Governments encouraging commercial exploitation

The Blue Mountains National Park also faces destructive flooding of wilderness areas if Warragamba dam wall is raised and noise and pollution from Western Sydney Airport.

The much loved Blue Mountains National Park is the most popular NSW park with 5.2 million visitors in 2016. This was a 44% increase on the 2008 figures and the visitor numbers continue to grow. Echo Point and the Three Sisters is the most popular tourist destination in NSW after the Sydney Opera House.

The park is one of the eight protected areas that, in 2000, was inscribed to form part of the UNESCO World Heritage-listed Greater Blue Mountains Area.

National parks need good managers who are sufficiently resourced to protect the parks' values. However, the National Parks and Wildlife Service has been subject to funding cuts, restructuring and loss of staff expertise.

Show our political representatives and candidates in the coming federal and state elections how much we care about our national parks!

Organised by Blue Mountains Conservation Society. Speakers include Anne Dickson, President of National Parks Association, Carolyn Pettigrew from Parkwatch, Keith Muir Director of Colong Foundation, Joan Domicelj, the author of the Greater Blue Mountains World Heritage listing proposal in 1999 and Blue Mountains Conservation Society.

Ecopella, an environmental choir that sings about the beauty of our world and the struggle to protect it from exploitation and degradation, will provide inspiring songs!

For more information see our website at bluemountains.org.au

It's Time for Genuine Policies on Climate Action Robin Mosman

In Australian cities last November, thousands of students skipped school for a day to protest the Coalition government's lack of action on climate change.

Their protest was inspired by 15-year-old Swedish schoolgirl, Greta Thunberg, who went on strike ahead of Sweden's national election last year to demand that the country's leaders do something about climate change.

One of the leaders of the School Strike 4 Climate Action, Harriet O'Shea Carre, said: "Our message is for our government and the world to take the climate crisis seriously and start treating it like the emergency it is so we can have a safe future and a sustainable planet to live in."

Our children can see that their futures are being sacrificed by politically motivated governments of climate science deniers and climate action procrastinators. This year, with elections happening at both Federal and State levels, it is time for Australian citizens to demand real political action on this issue.

Federally, so far, neither of the major parties is really offering this action. Labor's energy plan, with its focus on renewable energy, is more than anything the Coalition has so far been able to deliver. However, its policy on coal, with its contribution to global emissions, remains deeply depressing, with coal mining seen by Labor as continuing to be an important industry for the Australian economy. And there has been no recent mention at all of where they stand on the issue of Adani.

The Coalition's policy consists only of its proposed replacement for the National Energy Guarantee (NEG), publicly rejected even by business groups. Their position on coal is clear from the reaction of Minister for Resources and Northern Australia, Matt Canavan, to the

announcement by Adani early last December, when large parts of Queensland were burning and gripped by drought, that they have secured finance and plan to start work before Christmas. "We need these jobs and this is great news for the future of central and northern Queensland" he tweeted.

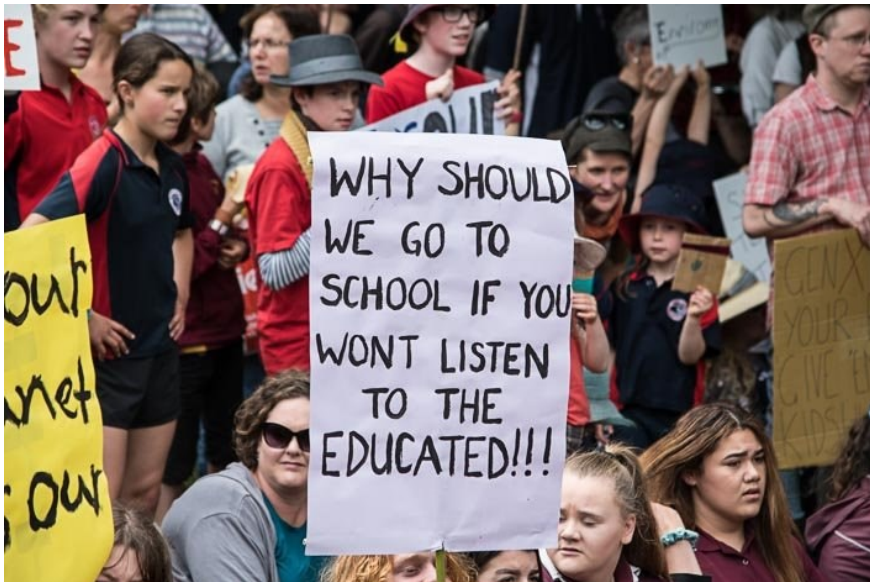
Australian Climate Council chief executive, Amanda McKenzie, said "Adani has put the ball firmly in the court of the major political parties. Do they support a coal mine that is fundamentally at odds with protecting Australia from the worst impacts of climate change?"

At the state level, it is worth noting that NSW is one of the worst performing states on renewable energy, along with WA and the Northern Territory.

With the state government responsible for approving coal mines, the NSW government has a huge responsibility for climate change through the export of global emissions. Over the past 30 years, both political parties have been enthusiastic supporters of coal mining.

At the start of 2019, there are currently **11 new coal projects proposed for NSW** that together would have a greater impact than the Adani mine, mining more coal, taking up more land, using more water, and producing 181 million tonnes of CO₂.

In the lead-up to the Federal and NSW elections, it is imperative that the leaders of both parties step up to their responsibilities, not only for renewable energy, but also for the mining of coal in Australia. The extreme temperatures we have been experiencing this summer are just the beginning of what Australians will have to endure in the future if climate change is not brought under control.



VALLEY OF THE WATERS BUSHCARE GROUP

The Valley of the Waters Bushcare Group meets on the second Saturday of each month, 9am - noon. Tools and gloves are available.

Bring a drink, a snack and a sunhat.

NEW MEMBERS ARE WELCOME.

Phone Karen 4757 1929.

Volunteer "Tour Guides" needed

"Tourist Trains" with up to 30 visitors in one train carriage, will be travelling from Katoomba to Lithgow on 8th April and 23rd May. The tour will highlight the tourist potential of Lithgow's Gardens of Stone. Train tour guides are needed.

If you have a loud, clear and interesting voice and are someone who loves to share the magic of the pagoda country between Katoomba and Lithgow as well as the history, geology, forests, world heritage and railway history of the Blue Mountains, we would love to hear from you. A portable microphone will be available.

The visitors will be from Gordon Park Probus Club and the University of the Third Age (Northern Beaches). The tour will finish on arrival at Lithgow Station.

For more information contact Janine Kitson 0428 860 623, Gardens of Stone Alliance.

NSW State Election Questionnaire Alan Page

The Society has prepared a detailed environmental questionnaire for Blue Mountains and Penrith candidates at the March State Election.

The document was sent to candidates from the major parties in early December. The responses to the questionnaire will be on our website - both as the returned document and in a comparison of responses.

For this election, we're also asking candidates from the Penrith Electorate as it takes in parts of the Lower Blue Mountains.

If approached, we'll provide our questionnaire to candidates from the minor parties and independents, and will include their response and a profile on our website.

Candidates have been given the opportunity to "tweak" their response over the course of the election.

As in previous elections we will not be supporting any candidate, but will point out where their policies differ from each of our positions.

Our Asks

The questionnaire is more than a series of questions we would like the candidates to answer. It has become a quadrennial statement of the Society's issues, concerns and goals - and could be viewed as the state of health of the Blue Mountains environment.

We often refer to the questionnaire as "Asks". This dates back to the 2011 State Election when we prepared "Election Asks". In other words "what do we want?"

In 2015, our Asks evolved into a comprehensive questionnaire that we put to Blue Mountains candidates from the major parties. All candidates responded.

<https://www.bluemountains.org.au/election15-questionnaire.shtml>

This Election

Each of the questions for this election begins with a background section. This is then followed by a simple yes/no question, then a more open question on what they would do, if elected, to address or progress the situation.

The 2019 State Election Questionnaire has been divided into 5 groups.

Protecting Our World Heritage National Parks. This concerns addressing the threats to the parks – specifically -

- Restoring the funding of the National Parks & Wildlife Service's core function, that is, nature conservation
- Ensuring the parks' biodiversity is maintained
- Preventing inappropriate development within the parks
- Saving our wilderness areas from horse riding, dam raising and the airport.

Expanding Our National Parks. We're promoting areas of private or Crown land which would enhance and protect the Blue Mountains National. These include:

- Gardens of Stone Stage 2
- Radiata Plateau
- Several strategic additions.

Appropriate Local Development. The Blue Mountains is not another suburb of Sydney. Its villages are on a ridge within the Blue Mountains National Park. This is unique and development needs to observe this constraint. Our questions address:

- The Council's proposed Residential Character Conservation Zone (R6)
- Deforestation and excessive land clearing
- Controlling invasive species
- Medium Density Housing.

Climate Change and Coal Mining. This group concerns climate change and one of its horsemen, coal mining.

Also included in this group is the qualifications of people appointed to an Independent Planning Commission when assessing developments which impact on threatened species and communities.

Waste and Recycling. And last, but not least, a question on two environment pollutants - single-use plastic bags and products containing microbeads.

We don't expect all candidates to embrace all of our "asks" and will respect any differing views. We would like our prospective politicians to be straight with us and would prefer a negative but clear answer to "weasel words".

Sounds of summer: why are cicadas so loud?

By Eliza Keck, CSIRO

Cicadas hold the record for the loudest insect in the world. While every species has their own special call, many use the same tactic to increase their chance of finding a mate while avoiding predators: they group together and sing in chorus. The logic is similar to why fish swim in a big school; by being noisy all together, they hope that the many predators that crave the crunch of cicada (such as birds, ants, spiders and even bats) pick one of their noisy neighbours instead of them. The collective sound is also painful and discombobulating for many predators. The time of day they sing is also no accident: during hot, oppressive weather most predators are too busy trying to keep cool to go hunting. Pretty clever, huh?

So how do such tiny creatures make such overpowering overtures? Scientists are still trying to figure it out fully but the general gist involves a pair of ribbed membranes on the abdomen called the tymbals. The male cicadas contract the muscles in their abdomen (called internal tymbal muscles) which causes the tymbals to collapse inwards, creating a pulse of sound. When male cicadas sing, their ear-parts (called tympana) also crumple up so they don't deafen themselves. Fun fact: While you'd be used to hearing the larger, very loud cicadas, some smaller cicada species are known to also sing loudly, but at a pitch too high for us to hear!

Read the full article at <https://blog.csiro.au/sounds-of-summer-why-are-cicadas-so-loud/>

“Dieback disease” detected in Blackheath

Many ConSoc members will know about the highly virulent and invasive plant pathogen *Phytophthora cinnamomi* and the disease “dieback” it is causing across much of Australia.

It is present in all states and territories of Australia and widespread throughout NSW, including in all national parks. It affects an extremely diverse range of native, ornamental, forestry and horticultural plants. Large areas of native bushland in several states have been devastated; the flora of Western Australia has been particularly badly impacted, with over a million hectares affected and the disease has caused a dramatic change to the vegetation of Wilsons Promontory in Victoria. The widespread loss and simplification of native vegetation that dieback causes results in severe secondary ecological damage through loss of food and habitat for native fauna such as the many animals and birds that depend upon vegetation for shelter or nectar and seeds for food. All this results in dramatically reduced ecological richness in affected areas.

Many of the susceptible species are found in the Blue Mountains and of particular local concern is the reported sensitivity of *Eucalyptus* (including *piperita*), *Leptospermum* (including *polygalifolium* and *lanigerum*), *Banksia*, *Hakea* and *Xanthorrhoea*.

My concern as a microbiologist was piqued when I heard that the death of mature rhododendrons and cypress trees in Soldiers Memorial Park Blackheath was assumed to be due to dieback but that no formal testing had been carried out to confirm this. I then noticed other dead trees nearby - a large dead *Banksia* in a private yard and a *Hakea* in bushland - and decided to investigate.

I tested soil samples from five dead trees – a *Rhododendron* and 2 *Cypress* from Soldiers Memorial Park, a *Banksia* from a private garden nearby and a *Hakea dactyloides* from adjoining bushland.

The method I used to detect the presence of the organism uses lupin roots as bait to attract the organism. The organism, if present, causes deformation, withering or rotting of the roots which is clearly seen after 7 days.

All five soil samples tested positive for the presence of the organism, as shown by the damage to the roots of the seedlings (see examples in photos below).

Since the organism is spread by water, I conclude that it's very likely to be widespread in the Popes Glen Catchment and most likely in the whole length of Popes Glen Creek, perhaps into the National Park downstream.

The implications of this for the local flora and fauna around Blackheath and for the Upper Blue Mountains more widely over the coming decades remain to be seen, since a wide range of local plant species are known or strongly suspected to be vulnerable to the disease. The picture is likely to evolve slowly, since although some species die quickly (*Banksia*, *Hakea*,

Xanthorrhoea), others may succumb over a period of years (*Eucalyptus*). In this context, the impact of the disease is likely to increase as temperatures rise over the coming decades.

Options for management and containment are limited. Attempts at physical containment and creation of exclusion zones have been largely unsuccessful when tried elsewhere, in part due to poor compliance, in part to distribution by vectors such as water.

Heavy mulching of infected areas can help to minimise movement of infected soil and help to enhance resistance of desirable vegetation by enriching the soil microflora. However, to remain effective, the mulch would need to be replaced regularly, perhaps annually and this may have adverse effects on some native plant species.

Agricultural fungicides effective against *Phytophthora* are widely used in commercial cultivation of a variety of crops including turf, avocados, potatoes and pineapples. However their toxicity rules out their broad-scale application in, for example national parks or in public places such as Soldiers Memorial Park.

An alternative is the relatively benign fungicide *phosphonate* (AKA *phosphite*). It is non-toxic to people or animals, does not affect soil microbiota and has a very low pollution risk associated with its use. Phosphonate is delivered to the plant's circulatory system by foliar spraying or stem injection and works by boosting the plant's own natural defences, thereby assisting susceptible plants to survive within *Phytophthora* infested sites, or to recover from infection. However, its effect is not permanent; foliar spraying is said to last up to 2 years, stem injection up to 5 years.

More information about the disease, its distribution, species specificity and management, as well as the method of testing, are given in the complete report which can be found at <https://www.bluemountains.org.au/documents/hutnews/archive/1902-hutnews-dieback-report.pdf>

Alan Lane, January 2019

Images below: Response of lupin seedling roots to some of the soil samples tested. Roots that are withered, deformed or rotting compared with the controls indicate the presence of Phytophthora.



Moffitt family legacy honoured in Gardens of Stone



A grand gathering of those who have contributed to preserving the Gardens of Stone and Greater Blue Mountains World Heritage took place at the Maiyingu Marragu Aboriginal Place, north of Lidsdale, on 5th December 2018. They were honouring the legacy of unionists and environmentalists Joyce Moffitt and Vern Moffitt and celebrating the naming of pagoda formations for these two loved and respected campaigners.

Our Society President, Madi Maclean, represented Blue Mountains Conservation Society, fittingly since Madi joined Management Committee as our Gardens of Stone project officer. Among attendees were Auntie Helen Riley, Elder of the Wiradjuri people, Bob Debus, former Labor state and federal minister and founder of LEAN (Labor Environmental Action Network), Trish Doyle, current State Member for the Blue Mountains, Jack Munday, stalwart of the “Green Bans” movement, David Shoebridge, current Greens member of the Upper House, Lithgow Deputy Mayor Wayne McAndrew, former Blue Mountains Mayor Jim Angel, and representative John Koch and members of the Combined Retired Union Member Association (CRUMA).

Deputy Mayor McAndrew made a plea not to demonise “the industry and the men and women who make a living from working in the mines”, whilst admitting that “things had to change”. Colong Foundation Director Keith Muir said that “nothing in the Gardens of Stone Reserve Proposal would threaten Lithgow’s economy if it were protected as a State Conservation Area”. The beautiful songs of Lithgow Environment Group’s Peter Drinkall adorned the proceedings. The provision of transport donated by Newnes Cabins’ Thomas Ebersoll greatly assisted the older members of CRUMA.

Blue Mountains Conservation Society has long argued that a Gardens of Stone Stage 2 State Conservation Area can be a win-win for Lithgow workers as it permits the continuation of underground mining, can rejuvenate and transform the Lithgow economy into a vibrant new tourist economy and can protect Lithgow’s internationally significant pagodas and threatened upland swamps.

Vern and Joyce Moffitt were very well known to unionists and environmental activists in the Blue Mountains, Bathurst and Lithgow area for many decades. Attendees

were delighted that Moffitt family members including Vern and Joyce’s sons, Michael and Robert, were able to share in the gathering.

In connection with the occasion, Trish Doyle MP wrote “(Vern and Joyce) had great vision and recognised the importance of the environment in the lives of workers and their families ... It is wonderful that at this very special gathering, Combined Retired Union Members Association is bringing together a bunch of people who share their passion and enthusiasm for the environment.”



Photos by Dave Noble:

- Gardens of Stone banner at Maiyingu Marruga Aboriginal site.
 - Moffitt family unveil Moffitt pagodas sign
- Text prepared by Jean Kitson and adapted by Don Morison.

BMCS NURSERY PLANT SALES

We offer the home gardener, landscaper or contractor a big variety of quality local native plants at economical prices.

Blackheath Community Market, 1st Sunday of the month at Blackheath Public School, 9am to 1pm

Magpie Market, 3rd Sunday of month at Lawson Public School, 9am to 2pm

Tube stock \$3. Discounts for bulk orders.

Enquiries: Hugh Brougham 0407 955 028

nursery@bluemountains.org.au

THE SAVE KOSCI WALK HAS ENDED AND THE CAMPAIGN CONTINUES ...



Photos (from top)

Source: <https://savekosci.org/>

North Ramshead Range, Kosciuszko National Park. At 2100 metres, this spot shows no wild horse damage yet, but feral horses have been observed within a few hundred metres. (Tony Brown)

Spotted-tailed quoll uses a stick to cross horse-trampled mud to water, on private property 200 metres from Kosciuszko National Park boundary.

The five full distance walkers, one frog, and one organiser, on the summit of Kosciuszko, 8 Dec 2018.

The Save Kosci walk ended on the summit of Mount Kosciuszko on 8 December. Over 100 walkers walked on the first day, around 200 on the final day and five full distance walkers completed 560 km over 36 days. Along the way, other walkers joined for a day or a few hours. Nine members of the Society's TINGLER* group joined a dozen other walkers for half a day at Buxton and one member joined the walkers for a short distance at Royalla, 12 days later. The long distance walkers will have many happy memories and many 'quiet bushwalkers' have discovered environmental activism.

John Barilaro in the NSW Legislative Assembly in June 2018 said "There is nothing quite like seeing a brumby in the wild. It is an absolute thrill". And the NSW State Government proclaimed a feral species as "heritage". The reality is very different. Habitat loss and degradation caused by feral horses throughout the alpine Kosciuszko National Park has been listed as a key threatening process by the NSW Threatened Species Scientific Committee. And horses are starving and dying a slow and painful death.

Please go to the Reclaim Kosci website <https://reclaimkosci.org.au/> and send a letter to your MP.

On the website there are details of a colouring competition for children aged 12 and under, with beautiful drawings to download and colour in.

*TINGLERS—Members of the Thursday Interpretive Nature Group

Great Grose Weed Walk: Autumn 2019

Blue Mountains National Park is a spectacular World Heritage wilderness right on Sydney's doorstep. The desire to protect it is strong and brings its own rewards.

The Great Grose Weed Walk has been going for over 25 years. This volunteer program encourages everyone to join in and protect this precious area by helping to stop the spread of weeds. All are welcome, and most activities don't require Bushcare experience.

Autumn activities start on 7th March. You can find a copy of the program at <https://www.bluemountains.org.au/documents/hutnews/1902-great-grose-weed-walk-autumn-2019-brochure.pdf>

A Past President Remembered

Robin Corringham was President of the Upper Blue Mountains Conservation Society from 1990 to 1993. She and husband Ron had become residents of the Mountains in the 1960s after spending time in other parts of the world. Robin had faced a risky childhood in Rabaul where she and her mother amazingly survived inside their house as it moved downslope on a slide triggered by seismic activity. Life in the Mountains brought adventures of a different kind as Robin fought the fires that threatened their first home in Warrimoo in 1968, and later in 1977/78, their next home in Woodford.

Despite the occasional perils of Mountains life, Robin and Ron combined an interest in photography with a love of the bush. They joined the Society for Growing Australian Plants (SGAP) Blue Mountains Group in 1972 and became active workers in the Native Plant Reserve at Glenbrook. With training in horticulture, and having run a camellia nursery, Robin had found a new outlet for her skills.

In 1984 Robin established the Blue Mountains Register of Significant Trees based on the Victorian scheme. The final register of some 73 trees was presented to the Blue Mountains City Council and incorporated into the BMCC Development Control Plan of 1988; it aimed to ensure the survival of nominated and assessed trees, both foreign and native, within the city limits.

Also in 1984 Robin joined with Margaret Baker and Jill Dark to write, photograph and publish the first book on Blue Mountains flora, *Native Plants of the Upper Blue Mountains*. This was followed in 1985 by *Native Plants of the Lower Blue Mountains* and in 1986 by *Native Plants of the Sydney Region*. Robin later went on to co-author with Margaret *Birds of the Blue Mountains* (1988) and *Native Plants of the Blue Mountains* (1995) as well as several other titles.

During the 1980s Robin became more active in local conservation, encouraged by studies completed in 1988 in the Associate Diploma in Environmental Studies at the then Mitchell College of Advanced Education. Her involvement in the Upper Blue Mountains Conservation Society from this time included assistance with the incorporation of the Society in 1987, involvement in the campaign surrounding Local Environment Plan 1991 and a term as Society President from 1990 as well as being its newsletter editor. Robin has been described as the “go-to” person for advice about land use issues at that time and provided practical plant identification assistance to groups such as the fledgling Minnehaha Bushcare Group (1991).

Bush regeneration came to the Mountains in the mid-1980s; the BMCC was petitioned to establish a program of co-ordinated weed removal by the Bradley Method of Bush Regeneration, but this was very slow coming. By the late 1980s volunteer bush regeneration groups were forming and some volunteers, together with an UBMCS delegate, attended a Sydney seminar on urban bushland held by the Nature Conservation Council. The Society was then encouraged to run a workshop about local bushland issues, bush regeneration opportunities and the need for council assistance. So in 1990 Robin, as President, organised for the UBMCS to hold a workshop for existing groups, the Blue Mountains City Council and

other interested parties. The formation of the Bushcare Network emerged from that day and it set about lobbying council to employ a Bushcare officer (1992) to support existing groups.

Robin turned her attention to the depredations of new transport infrastructure through the area. Memorable were her meetings from 1990 – 1992 with RTA consultants over the Woodford Bends reconstruction EIS. Her requested sandstone viaducts were rejected but she insisted on the road verges being planted with natives that in time were supplied from the Conservation Society's nursery. This facility was established in 1990 by Wyn Jones, assisted by Robin and Ron, on NPWS land in Blackheath. Robin then capably managed the nursery from 1991 to 1994, setting this vital Society asset on the way to commercial viability. Early volunteers remember her patient, expert training and capable leadership of the nursery team.

Robin maintained good communication with the Blue Mountains City Council, Blue Mountains NPWS and the Sydney Water Board. She researched and wrote a paper on the ecology of a number of Blue Mountains Eucalypts in *A Survey of Rare Eucalypts* (1987) then, after successful tendering for a flora and fauna survey of the Woodford Dam catchment and field work carried out by UBMCS members, produced the *Woodford catchment area vegetation survey* (1990) and *Fauna Survey of the Woodford Dam Catchment Stage 1 and Stage 2* (1990, 1991).

In 1994 Robin and Ron moved to Bingi now Meringo, south of Moruya. Robin became the first President of the South-eastern Region District Group of the SGAP and remained part of the group until the early 2000s. Robin had developed a fascination with fungi while still in the Blue Mountains and she greatly expanded on this interest with involvement in the identification, ecology and photography of that kingdom during her years on the coast. Many of her photographs of regional species can be found on-line. Sadly, just a few days after penning the last of many letters written in her distinctive field naturalists' style, Robin died in her beloved garden in Meringo on the 20th August 2018, some weeks short of her 88th birthday.

Margaret Baker, November 2018

Gardens of Stone Visitors Map

The Visitors Map is full of suggested walks and trips. It is in full colour, 60 by 85 cm in size, and covers the entire Gardens of Stone region at a 1:100,000 scale, making it ideal for planning your next trip to the area. You can buy a map on the society's website at

www.bluemountains.org.au/GoS_VisitorsMap.htm

DEEP IN THE HEART

Deep in the heart, there is a yearning,
For what is unknown, not understood,
Deep in the heart, there is a burning,
To do what we should.

Denis Kevans

Wild Life in Blackheath Christine Davies

This summer, a brave little mother Red Wattlebird sat on her nest in the old scribbly gum in my garden, through heat and storm and pelting rain and even hail. Both parents are now feeding a young Wattlebird in the nest (Jan 24). Sometimes the Koel's egg is laid in the nest of a Red Wattle Bird.

All through December we have heard the persistent call of the Koel and occasionally the raucous calls of the Channel-Bill. These two cuckoos migrate to eastern Australia from New Guinea and Indonesia and further north to breed. I heard a very loud baby bird calling in the bush out the back and went to investigate (Jan 2). The juvenile Channel-billed Cuckoo was much larger than its unfortunate Pied Currawong foster parent and called incessantly "feed me, feed me" or sounds to that effect. I wonder if they are the same currawongs who raised a young cuckoo last year and if the same adult cuckoos return to the same place to breed?



Juvenile Channel-billed Cuckoo: "feed me, feed me, feed me ..."

MEMORIAL TO PARK STAFF AT PHILLIPS LOOKOUT

"NPWS Memorial

A place that honours NPWS staff who have lost their lives in the service of the NSW community."



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You can become a member of Blue Mountains Conservation Society

- **Post** this Application Form with your cheque or money order to: Blue Mountains Conservation Society, PO Box 29, Wentworth Falls, NSW 2782, **OR**
- **Join online** at: www.bluemountains.org.au

(Use capitals please—even for email address)

Name(s) 1.
2.
3.

Address:
.....PC

Phone(s)

Email

I/We agree to support the aims and objectives of the Society as set out on reverse side of this membership application:

Please sign if named above.

Signature(s) 1.
2.
3.

MEMBERSHIP FEES (please circle one item)

Single \$35 Concession (Senior/Student)\$25

Household \$40 Household Concession \$30

Corporate (negotiable)

Membership (circled above) \$

Donation (tax deductible) \$

Bushwalkers: please add

\$20 per walker per annum. \$

TOTAL AMOUNT \$.....

Send my copy of Hut News by

Please tick box ☐ mail ☐ internet only

Would you like to be involved in any of the following activities or working groups? (Please underline):

Land use/development issues; Environmental Education; Threatened species issues; Website and social media; Plant nursery assistance; Bushcare; Publicity/photography; Water quality/sourcing studies; Administration;

ENQUIRIES: Phone 02 4757 1872

Email: membership@bluemountains.org.au

Welcome to new members

George Bate	Saskia Krinks
Claire Bate	Amelia-Jane Krinks
Jenny Lloyd	Catherine Mahony
Michael Law	Mary Fell
Stephen Krinks	Gordon Fell
Ann Niddrie	Barbara Lepani

BLUE MOUNTAINS CONSERVATION SOCIETY www.bluemountains.org.au

'Like' us on Facebook:

Blue Mountains Conservation Society

Follow us on Twitter: [bmcnsnw](https://twitter.com/bmcnsnw)

BLUE MOUNTAINS CONSERVATION SOCIETY

Blue Mountains Conservation Society is a community organisation working to achieve the preservation and regeneration of the natural environment of the Greater Blue Mountains.

The Society believes that World Heritage status provides an opportunity for local community members to become custodians of the unique biodiversity and scenery of the Blue Mountains.

The Mission of the Society is to help conserve the natural environment of the Blue Mountains.

The Aims and Objectives of the Society are to:

- Disseminate and foster an understanding of the ideals of Conservation.
- Promote the need for ecological sustainability.
- Protect the natural environment—flora, fauna, habitat, water, land and air.
- Actively oppose those human activities which degrade or destroy the natural environment.
- Repair the adverse effects of human activities upon the environment.
- Encourage the love of the natural environment by conducting a regular program of bushwalks.
- Increase the pool of expert knowledge about the natural environment, through meetings, excursions, research and other activities.
- Provide information to the public on matters of Conservation, especially through the Conservation Hut at the Valley of the Waters, Wentworth Falls.
- Maintain close and friendly relations with like-minded groups.

A BEQUEST: Please remember us in your Will.

The Law Society of NSW recommends the following wording: "I bequeath the sum of \$..... to the Blue Mountains Conservation Society Inc. for its general purposes and declare that the receipt of the treasurer for the time being of the Blue Mountains Conservation Society shall be complete discharge to my executors in respect of any sum paid to the Blue Mountains Conservation Society".



Proposed Rehabilitation of Bell Quarry (DA294/18):

Native vegetation is slowly returning, without human intervention, to this sand quarry site west of Bell. Submissions on the potentially disruptive rehabilitation proposal being considered by Lithgow Council are due by 15/2/19 – more details can be found at (<http://council.lithgow.com/development-proposal-da294-18/>). At time of writing, Blue Mountains Council had received a Notice of Motion from Councillor Kerry Brown for BMCC to contact Lithgow Council to have the submission deadline extended.

140,000 tonnes of spoil per year from Badgerys airport site and other Greater Sydney development sites could be trucked along Blue Mountains roads if the current rehabilitation plan is approved.

Purple (Bathurst) Copper Butterfly Malina Smith

The Purple Copper Butterfly, *Paralucia spinifera*, is an endangered insect found only in the Central Tablelands of NSW, at altitudes of at least 900 metres above sea level. "Discovered" in 1964 and only formally described in 1978, this butterfly has not, as yet, been recorded in the Greater Blue Mountains World Heritage Area. However, it has been recorded close by and is certainly a species to know and look out for in the WHA.

This spectacular species of butterfly is small in size, with a maximum wingspan of about 30 mm. The upper side of its wings is black/deep brown with an exquisite bronze/green iridescence in the sun, whilst the undersides feature black, brown and grey patterns.

The Purple Copper Butterfly is a specialist feeder, eating exclusively a subspecies (*lasiophylla*) of Native Blackthorn *Bursaria spinosa*. One of the most fascinating aspects of the Purple Copper Butterfly's life is its mutualistic relationship with the *Anonychomyrma itinerans* ant, which also live in close proximity to the blackthorn that the butterflies rely on. The female butterfly will lay her eggs on the blackthorn or nearby debris that lies close to the ants' nests. The ants protect the eggs during the 2-3 weeks they take to hatch, and keep the larvae safe in underground nests during the day. Interestingly, the ants act as shepherds to the maturing larvae, allowing them to feed on the blackthorn in the night. Mature larvae will then pupate in the ants' nests until they emerge as butterflies between August and November. The ants benefit from the Purple Copper Butterflies in that they eat sugary honeydew excreted from a gland on the back of the larvae.

The mutually beneficial lives of these insects are truly intriguing examples of the synergetic nature of ecosystems. Purple Copper Butterflies are pollinators and act as a food source for other species, proving to be an integral element of their environment whose protection and preservation is absolutely paramount.

55. DIVERSE PARKLAND

PLANTINGS, Victoria Park, Goulburn

A leisurely journey between the two operating railway lines through our state's central and southern tablelands brings the traveller to Goulburn, believed first settled in 1833 and proclaimed a diocese through letters patent from Queen Victoria in 1863. The urban open-space plantings in our older cities and towns reflect many eras of attitudes to nature's bounty, ranging from the elegant Quota Club rose garden in this park to the "locals only" endemic plant garden in Grenfell NSW.

In the latter part of Queen Victoria's reign, the Australian colonies were home to an "acclimatisation movement" that sought to totally replace Australian plants and animals with European. The rose garden the Quota Club has established here is an impressive and conscientiously maintained example of horticulture.

But a stroll around Victoria Park also reveals flowering gums from other parts of Australia and paperbarks. There are even some very large and majestic Eucalypts that look thoroughly local.

The person on the seat (me) and my motor vehicle look insignificant when providing scale for the massive Eucalypt that probably took 100 years or more to reach this size. Even now that white settlement of Australia has lasted more than 230 years, that span is trivial compared to the documented extent of indigenous presence in Australia and the great saga of natural history that has allowed even humble urban parks to play host to hundreds of species of living things.

Photos by Christine Davies.



Sections of the Blue Trail featuring the western Blue Mountains can be found in past issues of Hut News: www.bluemountains.org.au/hutnews.shtml
The full Blue Trail is being added at www.simplyaustralia.com.au/category/blue-trail/



This "Blue Trail" is a collective description for sites in the western Blue Mountains that arouse natural or cultural interest or both. Most are only a short walk from roads or vehicular tracks. One day, a high quality walking path may link them.

BLUE MOUNTAINS CONSERVATION SOCIETY Inc: BUSHWALKING ACTIVITIES

Membership of the bushwalking group is open to Society members. The BMCS Bushwalking Guide which explains the numbered grades can be found on the Society's website www.bluemountains.org.au or can be posted on request. For more information call Maurice Kerkham 4739 4942, mobile 04024 02783, email mauricekerkham@hotmail.com or write to PO Box 29, Wentworth Falls 2782. **Late changes to the program will be published on the website.**

SATURDAY WALKS: Usually a full day longer walk at a faster pace. Bring morning tea, lunch and adequate water. If you are a new walker to Saturday walks, before attending contact the designated contact person or the Group Co-ordinator Harold Thompson harold.thompson@bigpond.com 6355 1762 or mobile 0409 010 737

Saturday Walks driver reimbursement: *In an effort to ensure that car drivers are adequately compensated for the use of their vehicles a driver reimbursement policy applies* (Check www.bluemountains.org.au Saturday Walks page for details)

REMEMBER TO KEEP COOL AND STAY HYDRATED.

Feb 9 and Feb 16 No walks are organised. Walkers can meet at Wentworth Falls s Stockyard Carpark, 8.00am and decide on a walk and leader for that day, according to weather conditions.

Feb 23 Govetts Leap to Pulpit Rock and return. Leader Emanuel 0419773906. 5km, Map Mt Wilson. Gr2. Contact leader to book in.

Mar 2 Daddar Cave and Bland Pool (chance of a swim) Leader Harold 0409010737 Meet Glenbrook Stn. Carpark 8.30am. 7k, Grd 3, Map, Penrith.

Mar 9 Mystery Walk. Leader, the ever popular, Bob 0408947325. Ring Bob closer to the day for details.

MONDAY LEISURE WALKS: Short Day walks of 3-5 hours, suitable for walkers of an average fitness. Bring morning tea and lunch and adequate water. The Group Co-ordinator is Keith Dorrian, 4736 1010, 04111 62345, keithdor53@hotmail.com

Feb 11 Empire Pass Lawson. Walk to Frederica Falls and then along creek to Dante's Glen, Fairy Falls, Echo Bluff and return to Lawson Station. Approx 8Km. Meet Lawson Bowling Club car park 8.40 am. Lyn Bevington 0432 352 850. Grade 3.

Feb 18 Golden Stairs Narrow Neck Katoomba then down to the Federal Pass and proceed to the Dardanelles Pass which in turn leads to the Leura Forest. After lunch climb up to Cliff Drive via the Fern Bower Track. Apprx 9Km. Katoomba Station Car Park 8-25 am Car shuffle Some 4WDS required Fare \$5-00. Mike Honey Ph. 4757 3660. Grade 3.

Feb 25 A walk in the Wild Dog Mountains. We will walk from Green Gully at Packsaddlers around the base of Narrow Neck around to Medlow Gap. From there to Mobs Swamp and return. Map: 1:25000. Jenolan. Blackheath Neighbourhood Centre 8-40am Car Pool Fare \$5-00. Mary and Wayne Read Ph. 0429 021 296. Grade 3.

Mar 4 Victoria Falls Mt Victoria Pleasant walk down to Falls and return. Mt Victoria Station 9-50am Car Pool. Tracy 0434 362 611. Grade 3.

Mar 11 Radiata Plateau Katoomba Great views into Megalong Valley. Katoomba Station Car Park 8-30am. Car Pool Fare \$2. Maurice 47394942. Grade 2.

THURSDAY PLEASURE WALKS: Walks 2-3 hours conducted at a leisurely pace to suit walkers on the day. Bring morning tea, adequate water and lunch if noted. Group Co-ordinator is Beverley Thompson, 4757 2076, denfenella12@bigpond.com

Feb 14 Deanei Reserve, Springwood. Meet rear of Westpac Bank, 9.10 am. Leader Maurice 4739 4942. Grade 1.

21 Feb Watsons Bay with a swim at Camp Cove. Meet top of escalators Central Station 9.30am. Leader Tracy 0434 362 611. Take lunch or buy it at Doyles. Grade 1

28 Feb Hyde Park, Hartley. Meet Mount Victoria Station 9.50am. Leader Tracy 0434 362 611. Car pool \$5. Bring your cossie for a swim in Lett River and lunch. Grade 1

Mar 7 Taronga Zoo to Clifton Gardens and return via Sirius Cove 6.5ks. Meet top of escalators Central Station 9.30am. Leader Jill 4751 6926. Take lunch. Grade 2

Mar 14 Blue Gum Swamp. Meet Springwood Station, north side 9.15am. Leader Bernie 0428 364 438. Car pool. Take lunch. Grade 2.

Society bushwalks on facebook: Visit <https://www.facebook.com/bmcslongerbushwalks/>

New Growth

Alan Page

Many plants give me joy throughout the year - not just when they're in flower - although that's special.

Next time you get the opportunity, have a closer look at the new growth of the Waratah, or check out its seed pods, or later still, look for the first sign of a flower bud appearing.

And Old Man Banksia. Gently feel its young leaves, and look to see whether its seed pods are open or closed - and have a guess at how old the seed pods may be.



New growth of *Banksia serrata*
(Old Man Banksia)

BMCS Planning & Development Resource Kit

Do you want to take action on an environmental issue in your neighbourhood or the Blue Mountains more broadly?

Do you want information about the laws and procedures relating to development and environmental protection?

Find out what **YOU** can do! Go to the Planning and Development Resource Kit

www.bluemountains.org.au/pdrk-welcome.shtml

For information about Plant Study Group and Thursday Interpretive Nature Group

Go to our website www.bluemountains.org.au and click on "Activities"