



"Nature Conservation Saves for Tomorrow"

From the President ...

Hopefully everyone has enjoyed the festive season. 2012 is well upon us and I often think at this time of year, what is in store for us?

The Coalpac Consolidation project continues to sit in limbo, but it is very likely to raise its ugly head at any time now. Many of our members have shown interest in our campaign against this project, but it is when it comes out for public review the hard work will begin. Submissions from individuals are very important and we will be asking our members and supporters to act to stop this monstrosity. If this project does get approved, it may be start of numerous similar projects in the area.

I do keep harping on about the number of members we have. Whilst 850 is a good number, it would be fantastic if we could get it back up to the nearer the 1000 mark. Our membership base is very important when we are dealing with governments. The more members we have, the more clout we have. If you have friends or family who are conservation minded, encourage them to become members.

In a similar vain, our AGM will be held in March. This is much closer than most people realise. If you feel you have some time to devote to the Society, please get in contact with myself or another member of the management committee (listed on page 2 in Hut News) to discuss what you may be able to do to help.

I will finish by mentioning that our monthly meetings are now being held on the **last Thursday evening of the month**. There was a good turn out for our January meeting. The presentation was on Bushcare, with some emphasis on Valley of the Waters, our own group. We plan to have interesting and informative presentations throughout the year and I encourage members to attend. It is also a good way to meet other members of the Society and to find out what is going on. Lachlan

MONTHLY MEETING

7.30 pm, THURSDAY 23 February 2012
at the Conservation Hut, Wentworth Falls

The Three Gorges Dam: an engineering success or environmental desecration?

The **Three Gorges Dam (TGD)** spans the Yangtze River near Sandouping in the Hubei province of China. It is currently the world's largest hydro-electric power station based on an installed capacity of 22,500 MW. The dam's principal functions are to produce electricity, increase the Yangtze River's shipping capacity, and reduce the potential for downstream flooding. But it has become a symbol of modern Chinese 'can-do', and is a major focus for national and international tourism.

The dam is marketed as an engineering, social, economic and environmental success. The latter claim is based on the dam providing renewable energy and limiting greenhouse gas emissions in comparison with coal- and oil-fired power stations; yet, as with many such dam projects, there is much controversy both within China and in 'western developed' countries. This arises because the dam has flooded cities, towns and villages, thereby displacing nearly 1.3 million people, has a major impact on river-associated ecosystems, creates an increased risk of substantial landslides, and potentially increases the likelihood of seismic events. Also, because of intense industrial and mining developments upstream, poorly controlled effluent is polluting the Yangtze and may ultimately affect the fish resources of the East China Sea.

At our February monthly meeting Brian Marshall will present a 'tourist's-eye' view of the TGD, consider some of the conflicting views about the TGD and attempt to place such developments in a broader perspective. (Brian gives some thoughts for you to ponder on page 7.)

Brian Marshall has consulted in and taught Engineering Geology whilst at UNSW and then at UTS, where he was Associate Professor of Geology. Concern for the environment grew from experiences in England, Tasmania and North America. He recently returned from Greenland and Iceland where he saw, first hand, some of the impacts of climate change. He served as President of Blue Mountains Conservation Society from 2005-2008.

The meeting on Thursday 23 February will start at 7.30 pm. Visitors are very welcome.



The Three Gorges Dam is a major focus for tourism

"Hut News", the newsletter of
Blue Mountains Conservation Society Inc.
P.O. Box 29, Wentworth Falls, 2782
Phone 4757 1872
Email: bmcs@bluemountains.org.au
Web page: www.bluemountains.org.au

President: Lachlan Garland: 0415 317 078
lachlan.a.garland@bigpond.com
Senior Vice President: Tara Cameron
0419 824 974 taracameron4@gmail.com
Second Vice President: Don Morison
8230 2116 2vp@bluemountains.org.au
Treasurer: Bart Beech (h)4739 9947
(f)9688 1440 (w)9896 9512
bart.beech@invensys.com

Administration Officer: Rob Baigent
4759 3104 rob.baigent@bigpond.com
Bushcare/Threatened Species Officer:
Clive Heywood Barker 0413 577 160
ozbundu@hotmail.com
CC/Sustainability Officer: Lis Bastian
4787 7533 ebastian@stoplaughing.com.au
Environmental Education Officer:
Gary Humble 4784 1648 0427 841 078
gaz.humble@gmail.com

Gardens of Stone Officer:
Karen McLaughlin 6355 2835
karen.mclaughlin@aussiebroadband.com.au

Landuse Officer: Ann Cantwell
4751 3215, cantwell@eftel.net.au
Lithgow Regional Subcommittee Coordinator:
Chris Jonkers 6355 1179
chrisandjulie@activ8.net.au

Meetings Secretary: Michael Maack
4751 3623 maack@ozemail.com.au

Membership Secretary: VACANT
Monthly Meeting Convenor: Brendan Doyle
4757 2197 brendan049@gmail.com

National Parks/World Heritage Officer:
Brian Marshall 4784.1148
briannamar@bigpond.com

Newsletter Editor: Christine Davies
4787 7246 hutnews@bluemountains.org.au

Plant Nursery Manager: Kevin Bell
ph/fax 4787.6436 kevinbell@eftel.net.au

Publicity Officer: Peter Green
4751 9474 peter@pwgreen.id.au

Website Officer: Alan Page 4784 1704
webmaster@bluemountains.org.au

Walks Convenor: Maurice Kerkham
4739 4942
mauricekerkham@hotmail.com

Project Officer-Food and Environment
Craig Linn craig.csmc@exemail.com.au

Project Officer-Meetings Heather Hull
4739 1493 hhull001@bigpond.net.au

Bushfire Representative: Hugh Paterson
4751.2303, mob 0427 512 303
goodbush@pnc.com.au

MEMBERSHIP ENQUIRIES

Lachlan Garland
0415 317 078
membership@bluemountains.org.au
PO Box 29, Wentworth Falls 2782

HUT NEWS EDITORIALS

The deadline for the next
issue of Hut News is

18 February 2012.

hutnews@bluemountains.org.au 47877246

Nursery News

Nursery re-opens: Our
Lawson nursery re-opened for
Wednesday and Saturday
morning sales (9am to noon)
on the 11th January and in the
three sessions held at the time
of writing, total sales have
been \$445.50. We now have
a good range of ground-
covers, shrubs and trees at the
same low price of \$2.50 for
tube-stock and 65mm pots
while advanced plants in larger
pots start at \$4. We also stock
six varieties of ferns at \$3.50
each or 3 for \$10 in 65mm
pots with larger specimens
starting at \$5. Come and have
a browse and you will be sure
to buy.

Can You Beat This? I'm not
claiming this as a record but
one of the grass-tree
(*Xanthorrhoea species*) spikes
in my garden was the biggest I
have ever seen at 3.72m (see
photo). Has this been a
particularly good season for
grass-trees and have any readers
noticed similar exceptional growth?

***Eucalyptus cunninghamii*:** I was at the Pulpit Rock lookout, Blackheath, recently and noticed that the many specimens there of *Eucalyptus cunninghamii* (the Cliff-top Mallee) had recovered nicely from fire and were sprouting numerous buds giving promise of a grand show in the coming months. Unlike most Eucalypts, which have grown tall by the onset of flowering, this little Mallee is only about 1m in height at this location so the flowers will be readily seen. Formerly *E. microphylla* (small leaves) then later *E. rupicola* (referring to its preferred rocky habitat), its current name honours Allan Cunningham (1791-1839), the Colonial botanist in NSW from 1816-1831 and 1837-1839 who collected the first specimens of this plant in 1822.

It occurs only around cliff tops in the Upper Blue Mountains and because of this very restricted and potentially fire susceptible location it is listed as a rare and threatened plant (ROTAP: 2RCa). As well as Pulpit Rock, I have also seen specimens around the cliff tops in Katoomba and at Sublime Point, Leura. In its natural situation it is normally only 0.5 -2m in height and 1-4 metres in width but in a more favourable growing situation it can grow much bigger such as the one in the Australian National Botanic Gardens in Canberra which has reached 3m high and 5m spread in 15 years. It has also been grown successfully in Sydney's sandy soil and makes an attractive garden specimen. We hope to offer some for sale later in the year.

My enjoyable stay at Pulpit Rock was soured when I noticed that a National Parks sign explaining the geology of the area had been vandalised and the words "millions of years" referring to the processes that had shaped the landscape had been scratched out. Further, back at Govett's Leap Lookout another sign had been similarly vandalised with Charles Darwin's name being erased. While I wonder at the closed mind of the misguided person who has done this, I am furious that they think their irrational beliefs give them the liberty to vandalise signs put there at public expense for the general information of the public.

Kevin Bell, Nursery Manager.



Photo: Andrew Bell, himself at an impressive 1.93m, measuring the 3.72 m spike.

March AGM and election of a new management committee

Blue Mountains Conservation Society's Annual General Meeting will be held at the Conservation Hut at 7.30 pm on Thursday 29th March.

At the AGM, all management committee positions will fall vacant. Some members of the present management committee will not be standing again.

Replacing people can be hard, but as the saying goes, 'many hands make light work', and as well as filling positions on the management committee we need people to help out on subcommittees and in many other ways.

So, please think about it. You can be an active part of Blue Mountains Conservation Society. You can volunteer as much or as little of your time as you are able. Please contact Lachlan (041 531 7078), Tara (041 982 4974) or Don (8230 2116) to discuss it. Full contact details are in the box on page 2 of this newsletter. No experience is necessary.

Duties and responsibilities of all management positions will be described in March Hut News.

Great Grose Weed Walk Program – Autumn 2012

Sat 25th - Mon 27th Feb (2 night remote): Two day remote trip walking downstream of Blue Gum Forest and weeding along the Grose River. This activity requires a good level of fitness and is weather dependant. Numbers are limited. Contact Vanessa Richardson – 4787 3112 or

vanessa.richardson@environment.nsw.gov.au.

Sat 10th - Mon 12th March (2 nights remote): This activity is an alternative in case of wet weather to the remote trip outlined above. Contact Vanessa Richardson – 4787 3112 or

vanessa.richardson@environment.nsw.gov.au.

Wed 14th March - Weeding with a View (9am-3:30pm): A well loved event that will include plating out the creekline that we have previously treated for weeds. This activity includes a special morning tea and lunch. Contact: Vanessa Richardson – 4787 3112 or

vanessa.richardson@environment.nsw.gov.au.

Wed 21st March - Hat Hill Creek Remote (9am-4pm): An opportunity to inspect the health of Hat Hill Creek, downstream from the decommissioned STP. This is a full day remote walk that will include off track and walking through creeks and over hangs. Morning tea and lunch provided. Contact: Vanessa Richardson 47873112 vanessa.richardson@environment.nsw.gov.au.

Sat 24th March - Katoomba Creek (8am-5pm): Continue the fantastic work in this creek by walking along a remote section of Katoomba Creek, searching out weeds. Off-track walking, moving around fallen trees, walking through and crossing creeks will be required. Morning tea supplied. Contact: Lyndal Sullivan 4780 5528 or lsullivan@bmcc.nsw.gov.au

Sun 25th March - Braeside Plant a Tree Day (9am-4pm): An opportunity to get your hands in the dirt and plant some trees to assist in the Braeside Swamp Restoration project. All tools, equipment, lunch and morning tea supplied. Contact: Vanessa Richardson - 47873112 or vanessa.richardsoyn@environment.nsw.gov.au.

Wed 4th April - Water Nymphs Dell (remote) 9am-4pm: A full day weeding that will assist the bushcare group in this area. We will be walking along a section of Blue Mountain Creek searching out any weeds. Off-track walking and wet feet will be included! Morning tea supplied. Contact Lyndal Sullivan – 4780 5528 or lsullivan@bmcc.nsw.gov.au



Book Review

The Australian Garden by Diana Snape will be of interest to those gardeners who love native flora and want to encourage wildlife into their gardens.

Diana's writing creates imagery for Walk-about gardens, Indigenous gardens and Grassland gardens, whilst writing about a range of garden styles. The design elements of using rocks, fallen timber, colour and water are described with empathy for the Australian landscape.

The importance of using local provenance plants in gardens to support local wildlife that have evolved in a relationship together is mentioned. Diana writes about plants that will support local wildlife and discourage invading species, for example *wattles, pea-plants and tea-trees will increase shelter, nesting and foraging sites for small, insectivorous birds* when large territorial honeyeaters or fruit eating birds are dominant.

Lomandras, Dianellas, Dodonaeas will attract native butterflies, whilst Australian daisies and heath plants will attract native bees.

To establish a wildlife habitat in a garden Diana recommends following the principles of Joan Bradley's book, *Bush Regeneration*. Lovely colour photos of native gardens will please and inspire you.

The Australian Garden, Designing with Australian Plants by Diana Snape, 2003, Bloomings Books, Vic. Available in Katoomba library.

Meredith Brownhill.

BMCS NURSERY

NATIVE PLANT SALES

Lawson Nursery –Wednesdays and Saturdays, 9am to noon.

The nursery is located in the Lawson Industrial Area on the corner of Park and Cascade Streets, opposite Federation Building Materials – turn south off the Highway onto Honour Avenue or Orient Street, then left into Cascade Street.

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

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

Tube stock \$2.50 each.

Enquiries Kevin Bell 4787 6436, email kevinbell@eftel.net.au

Members will be aware that the Society settled its case with Delta Electricity over water pollution in the Coxs River from Wallerawang Power Station in October 2011. The settlement essentially involved Delta Electricity committing to two courses of action:

1. Proposing limits on the pollutants.

In October 2011, Delta Electricity submitted an application to the EPA to vary Environment Protection Licence 766 to specify maximum concentration levels for **copper, zinc, aluminium, boron, fluoride, arsenic, salt and nickel in the waste water**. The EPA called for public submissions on the proposed licence variation. The Society, with the support of the Environmental Defender's Office, made an extensive submission. We were particularly concerned that the **proposed limits on the salt and heavy metals were too high**. The Society wants the levels of pollutants to be much lower in order to protect the aquatic life of the Coxs River.

Other organisations such as the Lithgow Environment Group, Sydney Catchment Authority, and the Hawkesbury Nepean CMA, also commented upon Delta's 766 licence variation application. The NSW Office of Water expressed similar concerns to the Society stating that **"the proposed value for electrical**

conductivity (salinity) of 2,600 µs/cm is too high.

The proposed discharge limit is well above the ANZECC (2000) water quality guideline trigger value of 30 to 350 µs/cm for upland rivers".

The Society is engaged in ongoing discussions with the EPA regarding changes to licence 766 at Wallerawang Power Station with a decision on limits expected in the next few months.

2. Full treatment of cooling blow down water from Wallerawang Power Station by the end of 2015.

The Society been informed by Delta Electricity that Sinclair Knight Merz has been engaged to undertake a "detailed review of the options for the full treatment of cooling tower blowdown under a range of climatic conditions. The first stage of this engagement will design and cost the various technical arrangements to sufficient detail that will allow Delta to select the most appropriate technical solution and prepare the necessary environment assessment materials" (January 2012).

This is a positive development and the Society will receive regular reports from Delta Electricity about progress for the full treatment options.

Safety for snakes and lizards in your backyard

As we all know, summer time is snake time and wildlife carers are busy rescuing unwanted and injured, snakes and lizards from backyards.

Here are some tips on how to create a garden that is SAFE for snakes, lizards and skinks, and how to create a garden that does not attract snakes and lizards if you do not want these animals in your garden.

During warm weather when reptiles are more active and breeding – or at any time

DO

- Do keep grass short – and before you mow or whipper-snipper, do check over grass to make sure it is clear of *reptiles languishing in the cool* or hiding in the longer grass
- Do remove wire or nylon mesh netting lying around your backyard.
- Do be careful with using household and garden chemicals. Reptiles are extremely susceptible to their side-effects
- Do keep your compost bins clean and sealed so they are free of rats and mice, so as not to attract snakes
- Do permit Blue Tongue Lizards and skinks to live in your garden as they eat snails and other garden pests
- Do try to keep your cats and dogs well away from any reptiles living in your garden.
- Do create a pet friendly area in the garden and a separate wildlife friendly area
- Do keep logs and dead brush clear to minimise snakes and lizards living in your yard if you do not want them, or else leave these items as habitat if you want to encourage reptiles to your garden.
- Do remove rock features if you do not want snake habitat e.g. Copperhead snakes love rock walls, rockeries and rock pools.

DON'T

- Don't allow your cats and dogs to chase and hunt reptiles
- Don't use snail pellets if you can avoid it – if necessary use the red coloured pellets as they are slightly safer
- Don't use rat/mouse baits e.g., RATSACK, because snakes, quolls and bird predators will be poisoned too if they eat a poisoned rat or mouse

Never remove bushrock from bushland, roadsides etc as it provides habitat. Reptiles (snakes and lizards) are protected species. *Do not kill them if you find them in your backyard. Fines can be applied in these circumstances.*

Call Reptile Rescue on 4759 1698 or 0400 960 696 or 0411 131 393 or WIRES 4754 2946 instead.

Wildlife Protection Sub-committee.

Gardens of Stone inspires winner of the Fleurieu Landscape Art Prize

The stunning pagodas of the Gardens of Stone provided the inspiration for this year's winning piece in the internationally acclaimed Fleurieu Landscape Art Prize.

The Fleurieu Art Prize is the world's richest award for landscape painting. It was established in 1998 and attracts interest from artists worldwide. The winner of this year's \$50,000 Fleurieu Landscape Art Prize, Julie Harris, depicts impressions of the western Blue Mountains, NSW in the diptych, prize winning work 'Pagodas at Newnes'.

Our campaigner Justin McKee was lucky enough to speak with Julie Harris about how she came to create the work that has placed the Gardens of Stone in the international spotlight.

"I was inspired to paint after bushwalking through the Gardens of Stone with a local guide. The first thing I recall was seeing the fantastic and incredibly long Blackfellows Hand Cave and the aboriginal cave art that appears there," said Julie Harris. "I also experienced the viewpoint from the top of the rock formations known as the 'Temples of Doom'. From up there, I was struck by the intriguing, eastern flavour of the pagoda structures and just how amazing and beautiful they are. After I returned home, the painting just came to life on canvas."

Julie has been painting since the age of 19 and has been showing regularly for the past 25 years. She enjoys working as a full time artist out of her studio in the Blue Mountains. "I'm appreciative of the work the Blue Mountains Conservation Society and other groups are doing to protect the Gardens of Stone. It truly is a magical place," concluded Julie. □

The Blue Mountains Conservation Society has been campaigning to protect the Gardens of Stone and create opportunity for nature-based recreation and tourism,

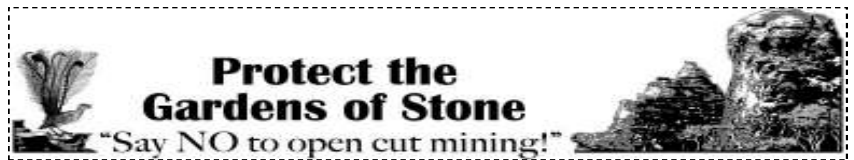
Communities in the Hunter Region are battling with the rapid expansion of the mining industry. A recent win for the community of Camberwell saw the rejection of the Ashton South East open-cut mine proposal.

"Coal cannot come at the expense of communities"

The NSW Planning Assessment Commission's decision not to approve the Ashton South East open-cut mine near Singleton is based on sound judgement. Both the NSW Department of Health and the NSW Office of Water had identified concerns about the effects of this mine expansion proposal. These are the government's own experts in their fields.

Why, then, would be the NSW Department of Planning and Infrastructure spend taxpayers' money on independent experts to seemingly discount the information and knowledge of the NSW Office of Water?

Regardless of whether the commission received this information on time or took any notice of it, the real issue is that NSW Department of Planning and Infrastructure decided to commission the work in the first place. The



offering a positive economic vision for the area under conservation management.

"The Gardens of Stone is now found to be the inspiration for an internationally revered art prize winner" says Justin McKee. "It is important that future generations may enjoy and be inspired by all the Gardens have to offer."

More of Julie's art can be viewed at www.julieharris.com.au or by visiting the Richard Martin Studio, 98 Holdsworth Street, Woollahra NSW.

result is that one government department appears to be undermining the advice of another government department.

Hunter Communities Network members have become closely involved in monitoring the various planning processes for the mining industry over many years. We have perceived a bias to the industry at the expense of community and environmental protection.

The Ashton South East open-cut mine seriously threatened the integrity of Glennies Creek and its connected groundwater. It also threatened the health of the Camberwell village. The Planning Assessment commission has made a good decision **not** to allow this short-term project to go ahead.

Mining should not be given the opportunity to continue destroying this important area of the mid-Hunter. There is now a shortage of labour in the mining industry in the Hunter Region and across Australia. Mining expansion is no longer about jobs; it is about the rapid extraction of coal while prices are high.

Bev Smiles, Hunter Communities Network

The Diminishing Thirlmere Lakes: Current Knowledge and the Independent Inquiry

Brian Marshall

Thirlmere Lakes are supposedly protected within the Greater Blue Mountains World Heritage Area. They are located west of the Picton-Mittagong railway line, and a few km west of Tahmoor (Fig. 1). Longwalls associated with Tahmoor Colliery are, at their closest point, about 750 m east of the Lakes and some 300 m below ground. The European history of the Lakes goes back to 1798, lake sediments provide a continuous record to at least 45,000 BP, and NPWS suggests a possible age of formation in the order of 15 million years.

Over much of the past 100 years, lake-levels have largely followed climatic variations, but over the last 15 years this superficial relationship seems to have changed. Current lake-levels are low despite drought-breaking rains and the follow-up rainfall events of the past few years. Many environmental groups, including BMCS, believe the anomalously low lake-levels may be a consequence of longwall coal mining which started in the mid-1990s and still continues. Their beliefs reflect anecdotal data, geographical relationships, precipitation records, knowledge of what might have happened based on an appreciation of the movement of groundwater through porous media, and the listing of longwall mining as a threat to water resources by the NSW Scientific Committee.

Because environmental groups repeatedly raised concerns about the diminishing Lakes with government and the media, the NSW Office of Water (NOW) was instructed to investigate. A report, the *Thirlmere Lakes groundwater assessment*¹, was produced in December 2010. It invoked the rainfall deficit to explain the anomalous behaviour and concluded: "...there was no evidence to suggest that mine fracturing or subsidence has affected the water levels in Thirlmere Lakes in any substantial way." BMCS and others rejected this finding, not least because ongoing heavy rainfall subsequent to the report has still failed to fill the Lakes.

Independent of government, environmental groups, coal companies, and any other organisation with a vested interest, Pells Consulting commenced a self-funded science-based investigation of Thirlmere Lakes in October 2010. The investigation, entitled *Report on the water levels of Thirlmere Lakes*², became available in late October 2011. The report's principal finding is that hydrologic modelling which fits lake levels from 1900-1990, **that is before the advent of longwall mining**, does not simulate recent behaviour because the Lakes are 1.5-2.5 m lower than predictions. The report accepts that drought up to 2006 had an effect, but the 1.5-2.5 m disparity is ascribed to increased downward seepage due to longwall mining. Specifically, longwall mining "...has impacted on the water balance of the lakes, leading to water levels that are lower than would be expected based on climate conditions". In short, there is a mining impact and this will continue while the coal seam is depressurised through coal extraction and discharge of the mine-water make.

Concerns by environmental groups about the superficiality of NOW's report, together with persistent media interest, presumably resulted in the current

Minister for the Environment commissioning an independent inquiry on October 25, 2011. This is to be conducted by the Thirlmere Lakes Inquiry Committee (TLIC) which, under its terms of reference (ToR), must submit the final report on or before 30 June 2012.

In a formal submission to the TLIC, BMCS asked that a résumé for each committee member be placed on the Office of the Environment's website as a matter of public interest, and for each member to stipulate that he or she has no direct or indirect conflict of interest, either now or over the preceding five years. After all, the TLIC is charged with effecting an unbiased evaluation of all available data and making managerial recommendations; the findings should neither be tainted by historical affiliations, nor be compromised by political and/or economic and social constraints.

BMCS noted the reasonably open and comprehensive nature of the ToR³, provided that the open-ended capacity to refer to a wide range of data and data-sources is fully embraced, and the entitlement to evaluate any 'non-specified' matters pertinent to the lowered lake-levels is fully utilised. The latter point was made because nowhere in the ToR was longwall mining mentioned.

The tendency of inquiries to distinguish between 'expert opinion' and 'submissions from the public' was also cited as a concern: the public is not stupid and anecdotal evidence should not be downgraded; environmental groups have **unpaid** expert knowledge within their membership and use it whereas a company's employees or paid consultants inevitably favour the company's perspective. He who pays the piper calls the tune!

BMCS further asked what might eventuate if the TLIC were to conclude that the lake-levels reflect climatic and mining-related inputs, as is suggested in the Pells report. Would the TLIC advocate further investigation to better understand the hydrology of the Thirlmere Lakes and better inform future management? And if yes, would the TLIC address the problem of whether a destructive mining-related process should continue unabated for the duration of the additional studies? And finally, as government is unlikely to stop the mining, would the TLIC advocate remediation through returning **suitably treated mine-water** to the Lakes?

On the basis of current information, the Society firmly believes that: once the hydrologic regime is changed by longwall mining, ongoing mining (irrespective of the company) **must exacerbate matters** because the depressurised zone is progressively enlarging; the Lakes will continue to be compromised until mining ceases, the workings fill with water and are effectively re-pressurised, and the pre-mining hydrologic regime is re-established or at least approximated. **How many years will this take and what will happen to the Lakes and their ecosystems over the interim? The best solution is to stop mining now and/or immediately enforce remediation by returning water to the Lakes.** (continued on page 7)



The Three Gorges Dam: an engineering success or environmental desecration?

Brian Marshall

Do we see the Three Gorges Dam (TGD) as black, white or khaki? Most would recognise it as the latter in view of the many articles espousing the engineering and environmental credentials, and the many other articles emphasising the environmental, archaeological and social costs. Much depends on where one starts the argument: one could embrace the final product and see it as an engineering success, emphasise the clean hydro-electric power, lament the loss of rare and endangered fish species and the destruction of a complex ecosystem, be dismayed at the forced relocation of a million people, recognise it within the context of China as an economic powerhouse, or see it as part of the damming onslaught affecting the world's major rivers. Balancing the scales is complex!

The talk will attempt to develop some aspects of the debate and place it within a broader context. The following dot-points are to start you thinking:

- The world's population now exceeds 7 billion – all seek ongoing improvement in their standards of living – all need increasing amounts of power and contribute to greenhouse gas emissions – all need food and water.
- 3% of the World's total water is 'freshwater'; surface water is only 0.3% of the 3%, groundwater is 30.1% of 3%, and the remaining 69%+ is locked into ice caps and glaciers; rivers amount to only 2% of the 0.3%, while the remainder comprises swamps (11%) and lakes (87%).
- Domestic, commercial and agricultural water demands are principally met from surface water, groundwater and desalination.
- Hydro-electric power essentially comes from damming rivers, yet rivers comprise only 2% of surface water and 0.00018% of the world's 'freshwater'.
- The TGD currently has the World's largest generating capacity and second largest annual production, but where does it stop?
- The majority of the World's major rivers in all continents have dam complexes existing and planned for hydro-electric purposes – the schemes proposed (and started) on the Yarlung Tsangpo/Brahmaputra River will dwarf the TGD
- The China Society for Hydropower Engineering emphasises the role of 'hydro' versus coal in reducing greenhouse gas emissions and states: *"For the sake of the entire world, all the water resources that can be developed should be developed."*
- In China, the ratio of coal-fired power to hydro-power is ~6:1 and increasing.

The Diminishing Thirlmere Lakes (continued from page 6).

What should you do? Very little at this stage: Pells Consulting is extending aspects of its unfunded research study, the Independent Inquiry must unfold, and RiversSOS and BMCS have variously notified the Director World Heritage Programme IUCN (International Union for Conservation of Nature) and, through him, the UNESCO World Heritage Committee, and the Oceania Vice Chair of IUCN World Commission on Protected Areas and Director of the Australian Committee for IUCN. In the meantime, BMCS is one of several groups closely monitoring outcomes.

¹ The full report can be downloaded from <http://www.water.nsw.gov.au/Water-management/Water-availability/Groundwater/Groundwater/default.aspx>

² The report may be purchased through Pells Consulting, email: philip@pellsconsulting.com.au, 49 Lakeside Drive MacMasters Beach NSW 2251.

³ These ToR may be accessed at <http://www.environment.nsw.gov.au/water/thirlmeretermsoref.htm>

Welcome to New Members

Brian Hart, Woodford
 Dawn Hart, Woodford
 Desley Isles, Blackheath
 Lisa Norris, Holsworthy
 Gayle Bailey, Warrimoo
 Frances Scarano, Katoomba

JOIN Blue Mountains
 Conservation Society, or
 renew your membership
 online. Go to our website:
www.bluemountains.org.au

The Lookout at Govetts Leap

Ron Hyslop

The Thursday Interpretive walkers had our end of year Christmas lunch at Christine's home, McLaren Crescent, Blackheath. It's a long lunch, of course, there is no use rushing things. Meeting earlier at 9.30, the plan was to head off for a leisurely (interpretive) two hour walk.

The mist was swirling around and rain was falling. I had that strange feeling that some of the group had **no** intention of walking. Still, we breed them tough in the mid to lower Blue Mountains. Four of us from that region donned our wet weather gear and set off for Govetts Leap Lookout. Two of the ladies only got as far as the information centre. Just as well - bushwalking with umbrellas doesn't seem quite right to me!

Now it was Jenny and me. We were only around three hundred metres from the lookout. Come hell or high water we were going to make it. The rain ceased and we walked down through that "magic mountain mist". All of a sudden strong gusts of wind were pushing through the trees above us.

The lookout was deserted. We had it to ourselves – no tourists, no clicking of cameras. So many times over the last thirty years I have stood and enjoyed this view. Sunrise, sunsets, cloudy, cold and sunny days. The picnic area has not changed a great deal – they still have the wood barbecues, bring your own wood of course!

Jenny and I spent maybe fifteen minutes here. Both of us were blown away by what we experienced. Visibility nil, the wind almost gale force, our hands were cold. Then everything opened up. Pale sunlight speared through the clouds. Trees down in the valley were still. You could see across to the Pylon lookout, Evans lookout track, pulpit rock. Across to our right those winds were blowing the falls across the rock face.

Behind a taxi dropped off a couple of young tourists. Surely they weren't going on a serious walk. Yes they were!

We turned around. The mist had enveloped the area. Then, once more, the valley opened up. Focusing hard, I fixed my eyes down to the stillness below and fast swirling mist being pushed through the wind. It was perhaps like being in a Vortex. Who needs 3D, or Black Holes in space!

We took the Fairfax track back to the house, through the mist. At the lookout we called to the young walkers below. "Come down, its lovely", came the reply. No thanks – been there, done that! Besides, we had just had those most beautiful fifteen minutes at one of my favourite lookouts. Back at Christine's house it was almost 12 o'clock and pre-lunch drinks were underway.



View from Govett's Leap Lookout. The mist swirled around ... the winds were blowing the falls across the rock face.

Australia Day meeting

Australia Day, wet and cold, a thick misty cloud hanging over Blackheath. Roger Federer playing tennis at 7.30, broadcast on Channel 7. Someone suggested we go to the monthly meeting and hear Lyndal's talk.

These were the options. Drive 40 km (there and back) in heavy fog along the Great Western Highway to a meeting at the Conservation Hut — or stay home in a nice warm house with a leisurely dinner and a glass of red and watch Federer play tennis. A hard choice!

It was a really good meeting. About 35 members braved the elements. Our new meeting format worked well. We kept it casual, left most of the tables in place, started off with a cup of tea/coffee and a chance to socialise. I enjoyed meeting old and new acquaintances. A short introduction by Lachlan, and then Lyndal Sullivan spoke about Blue Mountains bushcare.

Lyndal is an excellent speaker. She kept the talk short and allowed lots of time for questions. Her knowledge is such that she was able to answer a wide range of questions put to her by members. Brendan and the "Bushcare Choir" interrupted the proceedings to give a hearty Australia Day rendition of John Hill's bushcare anthem "Invasive Weeds Beware" (to the tune of Advance Australia Fair), with John accompanying them on his keyboard.

The evening was interesting and fun. Do try and come along next month. It's a great opportunity to meet other members. Christine Davies.

Help us get Hut News in the post

Our wonderful volunteer Diana Rich, who has been enveloping and posting Hut News for the past few years, is moving from the mountains. The job entails labelling envelopes, enclosing membership renewal notices and receipts, inserting the newsletters, and taking them to the post office—around the beginning of the month, 11 times a year.

We need somebody, or a team of people, to take on the job. Please contact Lachlan 0415 317 078 or email lachlan.a.garland@bigpond.com if you can help.

**The Greater Blue Mountains World
Heritage Experience**
www.worldheritage.org.au

Loose Feathers, with Carol Proberts

It was already late spring when I noticed the Eastern Spinebills repeatedly flying in and out of a dense shrub outside my kitchen window. Tiny high-pitched sounds every few minutes betrayed the presence of nestlings being fed. A few days later they were gone, probably fledged, and it seemed in no time the adult pair were industriously dismantling the nest and rebuilding it half a metre higher in the same shrub! Birds will often recycle their old nest materials. Only cobweb was gathered fresh, and there is an ample supply of that around the house. The delicate suspended cup took shape again over the next few days, finally being lined with soft feathers. For the second, possibly third time this season the female began incubating again, spending hours every day quietly sitting in the nest.

Rainy weather may be a short term inconvenience, but in the longer term it means that the insect and invertebrate populations flourish and there is generally more food around for birds. This year, many species seem to be having an extended breeding season, with two, three and perhaps even four nesting attempts in succession. The good conditions are a welcome opportunity after so many years of drought in the first decade of the 21st century.

Eastern Spinebills are members of the honeyeater family, Meliphagidae, and their diet consists largely of nectar. However, like all honeyeaters, insects are an essential supplement and make up the diet of the developing chicks. I watched the adult spinebill bring a large fly to one of their two nestlings. Imagine catching a fly with fine-pointed tweezers. The spinebill's bill is long, thin and downcurved, designed for accessing nectar from long tubular flowers, but, remarkably, also used with great success for snatching insects from foliage.

Birds can be ingenious with their choice of nesting sites. In December I noticed a pair of Striated Pardalotes in the Capertee Valley, nesting in one of those big drum letterboxes that many Australian properties have at their gate. The nest was situated in a small cavity underneath the wooden base that the mail sits on, inside the drum. As safe a location as it would be possible to find - out of reach of predators and the postman!

Carol Proberts (origma@westnet.com.au)



Photo: Eastern Spinebill, by Regina Wong

BLUE MOUNTAINS CONSERVATION SOCIETY

'Like' us on Facebook: Blue Mountains Conservation Society
Follow us on Twitter: [bmcsnsw](https://twitter.com/bmcsnsw)

Membership Application Form

(Use capitals please—even for email address)

Name(s) 1.
2.
3.

Address:
.....PC.....

Phone(s)

Email

MEMBERSHIP FEES (please circle one item)

Single \$30 Concession (Senior/Student)\$20
Household \$35 Concession (Senior/Student)\$25
Corporate (open to negotiation) \$100

Bushwalkers only:
(\$20 per walker per annum) \$.....
Donation (tax-deductible) \$.....

Send my copy of Hut News by
Please tick box mail internet only

TOTAL AMOUNT INCLUDED \$.....

Note: All fees include GST at the relevant rate.

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; Web or database management; Plant nursery assistance; Bushcare; Publicity/photography; Water quality/sourcing studies; Society administration.

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.

ENQUIRIES: Phone (02 4757 1872
Email: membership@bluemountains.org.au

Please cut out and forward this form with your cheque or money order to:
Blue Mountains Conservation Society Inc.
PO Box 29, Wentworth Falls NSW 2782
or pay online at www.bluemountains.org.au

You are invited to come along and get your hands dirty and enjoy a free BBQ lunch in a beautiful place with a great group of people.

Valley of the Waters Bushcare Group PLANTING EVENT

Wentworth Falls Reserve Picnic Area
Southern end of Falls Road

Saturday, 10 March, 9am to 2pm

BBQ lunch and morning tea provided

Bring gloves (if you have them) and water.
Tools will be provided.

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.



COME WALK WITH ME Reg Reid

Come walk with me in the early morning mist
before the sun awakes and the dawn can break
Feel the moisture in the air as you search for footsteps along the way
While ghostly shadow forms develop in your path
and the air begins to boil in turbulent rolls upon an ancient hearth.

Come walk with me to see the shadows take on form
so you can see they are the children of primordial dawn
Here a tree, a shrub, a fern,
a rock upon which later some resurrected moss will burn
But now, succoured, we one and all drink the freshness of the night's
most sacred wine
This bathing, nurturing, refreshing, enlivening ground cloud.

Come walk with me to know the stillness
Silence
The all-embracing fullness of the enveloping water shroud
that drifts upon your hair and enters into your very soul
Feel the cool and permeating mist
Know that by its lips you have been kissed
And sense the knowledge of desire for this the spark of life
that lights the all-consuming fire

Come walk with me for soon the sun must begin to take its daily toll
to wrest away the mist in heavenly roll
Revealing the stark reality of time and place
The moist and sparkling leaves, the shining grass
the waking life of animals as it gains pace
But for a time in a valley far below the mist may linger
holding on with slender outstretched fingers
Destined to pass away until another day.

Invasive Plants Beware John Hill, 2012

(to be sung with gusto to the tune of Advance Australia Fair)

Australian bush let us rejoice
Cause we have been set free
That ivy that was strangling us is now a rarity
Wally wattle stands out proud
And Mike rolina smiles
Bidgee Widgee chuckles as the privet dies in piles

(Chorus after each verse)
In joyful strains then let us sing, Invasive plants beware.

Doris Euk the Deanei now has a better view
And Polly (whose polyscias) enjoys a rendezvous
Old golpho and his lobium are feeling grand again
Miss Glycine and Phylota are now sipping on champagne.

When Cook and Co arrived in Oz
They brought with them some snags
But now those bush re gen er ators shove them into bags
They hate old Monty Brecia, his beauty is a farce
And know there's nothing all that sweet about sweet vernal grass

Australian bush let us rejoice
Cause we have been set free
At last the whole Fabacea clan can go and have a pea
Those humans wearing toolkits, them that wear those funny hats
They're bringing back the wildlife as they save our habitat

Chorus (twice)

*Photo (left). Twisted vines, rainforest walk, Mt Irvine
Botanic Garden—well worth a visit. Entry is through
the arch opposite the main gate.*

Down the Wallaby Track: a backward glance, with John Low

AN OLD MYSTERY SOLVED

It all began in November 1816 with the theft of a trunk valued at 16 shillings from the premises of its manufacturer in Leadenhall Street, London. The law acted swiftly and a month later the young offender, Edgar Church, was sentenced at the Old Bailey to seven years transportation, arriving in Sydney on the *Batavia* at the end of April 1818. Four years later he was working in a road party in a strange, lonely landscape in the grip of a Blue Mountains winter.

The elevated area behind the Explorers' Tree at Pulpit Hill is a very melancholy place and especially so in cold, wet and misty weather. And such a day it was when some time ago I joined some fellow enthusiasts to celebrate the first authenticated burial there. Until the twentieth century little interest was shown in the site and while appearing on some early tourist maps as an "old cemetery", it has long experienced both neglect as part of an unwanted convict past and trivialisation from well-intentioned (and mischievous) 'refurbishment'. Consequently, reports of grave numbers there have been amazingly contradictory.

Nevertheless, though not translated until 1938, there has always been one genuinely documented report of a burial - that made by the French surgeon René Primevère Lesson who, with his companion the naturalist and explorer Jules-Sébastien-César Dumont d'Urville, travelled to Bathurst in 1824 and found on the "wind-beaten height" a "still fresh grave". Lesson failed, however, to record the name of the "young man who died there in 1822" and gradually, with the years, all evidence of the grave and its marker disappeared. Even when the RTA undertook a Ground Penetrating Radar investigation in 2000 and identified one apparent grave site, it still seemed likely that the occupant would always remain anonymous. What a surprise then, when Sydney historian Edward Duyker, researching a biography of Dumont d'Urville, told me he had discovered the explorer's journal in a French bank vault and could now identify the young man buried on Pulpit Hill! D'Urville had recorded in English the inscription on the grave's stone marker. It was the young trunk thief, Edgar Church.

From depositions sworn at Church's inquest, it appears that on the evening of 20 June 1822 another convict road worker - they were not manacled and were not the hardened recidivists that made up the later chain gangs - found him dead in one of the small roadmen's huts in which they slept. He lay with his hand in his mouth, having suffered a seizure of some kind brought on by his recent consumption of rum. He was, according to d'Urville's transcription, 27 years of age.

There is something incredibly poignant about rescuing someone's memory from such a long period of anonymity and Church's story can now add much greater meaning to a site that has often puzzled visitors. It is interesting, too, that the RTA's investigation did not rule out other shallow burials. Who knows what future research will uncover.

John Low (johnlow@iprimus.com.au)

OFF WITH THEIR HEADS ...

NOW is a good time to cut Agapanthus flower heads before the seeds form, while they are still green and sappy.



Agapanthus seems to be on the increase in the upper Blue Mountains and has taken advantage of a wonderful growing season to put on a great exhibition of blue and white flowers. The flowers are beautiful, especially the blue ones, but they are a bush invader and an environmental weed. The underground structure (rhizome) forms large continually extending clumps, and seed washes down waterways. Agapanthus is also frequently dumped on bushland edges. Dense clumping roots displace all other vegetation.

I notice that some well-meaning person advertises weekly in the Gazette that they have Agapanthus for sale, and has been doing so for as long as I can remember. Just shows how these plants keep multiplying and are an ongoing problem to control.

Alternatives are available from our native plant nursery (contact Kevin Bell for more information). *Lomandra longifolia* grows well in my garden. I planted some 10 years ago and every few years I dig up a clump and divide it and replant. For damp places, try *Gahnia*, which is the larval food plant of the beautiful Swordgrass Butterfly. According to the book, there are a few butterflies which use the *Lomandra* plants, but I think they must be small insignificant species.

Look up the Blue Mountains City Council's "Weeds of the Blue Mountains" website (www.weedsbluemountains.org.au) for more information about how to control Agapanthus and about weeds in general. Or go to Council and ask for a copy of the free booklet. Christine.

BUSHCARE GROUP

The Valley of the Waters Bushcare Group meets on the second Saturday of each month, 9am till noon. Tools and gloves are available. Bring a drink, a snack and a hat. New members are always welcome. Phone Karen on 4757 1929.

'In the end, we will protect only what we love.

We will love only what we understand.

We will understand only what we are taught.'

Senegalese poet and naturalist Baba Dioum

BLUE MOUNTAINS CONSERVATION SOCIETY 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 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. Before attending ring the designated contact person or the Group Co-ordinator Jim Percy 4758 6009 or email jp34@tpg.com.au

- Feb 11 **Federal Pass** – Katoomba end – or an alternate walk will be decided on the day dependant on the weather. Leader: **Bob** 4757 2694. Meet Wentworth Falls Stockyard CarPark 8:30am. Approx 6 km. Grade 2/3. **Katoomba map.**
- Feb 18 **Deep Pass and River Cave.** - Visit Stanley Chasm and the spectacular **River Cave** where you're guaranteed wet feet. Leader: Emanuel 4757 1090 after 7pm. Contact leader for meeting place, phone or email emanuelanddi@yahoo.com.au Approx 6 km. Grade 3. Rock Hill map.
- Feb 25 **Dalpura Gully** - if the day is warm - waste deep wade – (bring swimmers, thermal top, wetshoes and/or change of clothing) – If the day is cool we will not wade and add Jinki Gully (gaiters & gloves). Leader: Jim 4758 6009. Meet at Mt Victoria Station CP, 8.30 am. 6 km. Grade 3. Mt Wilson map.
- March 3 **Roberts Pass** - Conservation Hut, Lilians Bridge, Roberts Pass and back up through the Valley of Waters. Leader: Meredith 4782 4823. Meet Wentworth Falls Stockyard carpark, 8.30 am. Approx 6 km. Grade 2/3. Katoomba map.
- Mar 10 **Glenbrook Creek** – upstream to the Duckhole. Magnificent canyon with friendly pools - Creek crossing and some rock hopping. Leader: Karen 4751 9695. Meet Glenbrook Station carpark, 8.30am. Approx 7 km. Grade 2/3. Penrith map.

Check the BMCS website (www.bluemountains.org.au) for updates.

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 Maurice Kerkham, 4739 4942, mauricekerkham@hotmail.com

- Feb 13 **Berghofers Pass.** Explore early mountains road. Meet Mount Victoria Station 9.45. Marion 4759 2575. Grade 2.
- Feb 20 **Radiata Plateau/Mt Elphinstone.** Great views. Meet Katoomba Station 9.30. Contact Norm 4784 1554. Grade 1/2.
- Feb 27 **CITY WALK. Spit Bridge to Manly.** An old favourite. Swim optional. Meet Central Station 9.30. Contact Ros 4733 3880. Grade 2.
- Mar 5 **Bald Head, Blackheath.** Forest walk and stunning views. Meet Blackheath Station 8.45, car pool. Contact Mary 4757 4569. Grade 2.
- Mar 12 **Terrace Falls, Hazelbrook.** Pool, falls, creeks. Meet Hazelbrook Station 9am. Contact Christine 4757 2864. Grade 2.

THURSDAY PLEASURE WALKS: Walks of 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, roybev12@bigpond.net.au

- Feb 16 **Dante's Glen, Lawson.** Steep descent into cool valley, past waterfalls and rainforest. Take lunch. Meet Lawson Bowling Club Car Park 10am. Barrie 4782 9235. Grade 2.
- Feb 23 **Du Faurs Rocks to Chinaman's Hat, Mt Wilson.** Take lunch. Car pool. Meet Mt Victoria Station 9.45am. Contact Maurice 4739 4942. Grade 2.
- Mar 1 **Darwin's Walk, Wentworth Falls.** Car shuffle to Falls Road. Take lunch. Meet Stockyard Car Park 9.30am. Contact Beverley 4757 2076. Grade 2.
- Mar 8 **Bus trip to Dunn's Swamp.** Bookings required, \$12. Walk past swamp and pagodas. Take lunch. Meet BMCC Depot, South Street, North Katoomba, 8am sharp. Contact Barrie 4782 9235. Grade 2.
- Mar 15 **Royal Botanic Gardens to Mrs Macquarie's Chair.** Take lunch. Meet top of escalators, Central Station, 9.30am. Contact Maurice 4739 4942. Grade 1.

This possum survived eating snail bait

This young male Brushtail Possum (470grams) was found lying on a lawn, immobile and freezing cold. His breathing was laboured and saliva was running from his mouth. There didn't seem much hope for him, but his finder called a wildlife carer to come and have a look at him. The saliva flow became excessive and the possum's chest heaved with every breath.

Then a vet diagnosed snail bait poisoning, so treatment could begin. After replacing lost fluids by sub-cutaneous injection, he was left warmly wrapped up in towels. Four hours later he was alert and by morning was curled up amongst some gum tips sleeping (photo). By the next morning he was nibbling some *Grevilleas* and gum tips. That night he was released and scampered up a gum tree to be reunited with his mother.

Please call WIRES 4754 2946 if you find a sick or injured native animal.

