

HUT NEWS

"Nature Conservation Saves for Tomorrow"



Iemma Government Legislation in Review

Under Morris Iemma's leadership of the ALP since 3 August 2005 laws have been passed that undermine the planning and development decision system, attack community participation and court challenges and introduce an even more uncertain future for threatened species. In almost all cases these laws were supported by the Opposition, with the role of 'environmental conscience' left largely to The Greens and Democrats.

The Environment Liaison Office (ELO) Groups strongly opposed six Government Bills that were introduced whilst Morris Iemma has been Premier and proposed amendments to improve twelve. The worst Bills included:

- The *Environmental Planning Legislation Amendment Bill*, which included an apparent attempt to dilute the prospects of the court challenge on the Anvil Hill coal mine. This Bill, along with others passed in the Budget 2006 and Spring 2005 sessions, also expanded the Planning Minister's powers under the widely opposed Part 3A.
- The *Threatened Species Conservation Amendment (Biodiversity Banking) Bill*, which introduced a new scheme that is likely to cause loss of high conservation areas traded for uncertain improvements elsewhere.
- The *Electricity Supply Amendment (Greenhouse Gas Abatement Scheme) Bill*, which ignored calls for improved action on climate change.

- The *Water Management Amendment Bill*, which undermined a court challenge seeking to guarantee water for the environment.

A number of the Government's environmental Bills were supported by the ELO Groups over the last three parliamentary sessions but none of these made major improvements. The Iemma Government is yet to take strong action in Parliament on climate change, sustainable water supply or sustainable planning.

Peter Debnam has been very weak on the environment since becoming Leader of the Opposition on 1 September 2005. The Opposition has supported most of the Government's destructive environmental laws whilst opposing a number of positive initiatives and ELO proposals to improve Bills. The Opposition did engage with the environment groups on the most recent Planning Bill and the Biobanking Bill, however its amendments did little to improve the situation.

The Greens (the Hon. Ian Cohen, the Hon. Sylvia Hale and the Hon. Lee Rhiannon), Democrats (the Hon. Arthur Chesterfield-Evans), the Hon. Clover Moore, the Hon. David Barr, the Hon. Alex McTaggart, and the Hon. Peter Breen were consistently supportive of good environmental initiatives and their actions are appreciated.

Owen Pascoe,
Environment Liaison Officer to NSW State Parliament
for the peak environment groups

WildCountry: a long-term, big-picture vision for nature protection in Australia

For thirty years since the days of the Franklin campaign, The Wilderness Society (TWS), working with conservationists across Australia, has concentrated its efforts on protecting nature step by step: protecting wild places one place at a time; and tackling threats to nature one threat at a time. It has been an amazingly successful approach: preserving 8.5 million hectares in national parks and wilderness areas; ending land-clearing across 18 million hectares of QLD; and ensuring protection for many wild rivers.

But in 1997 TWS asked itself—Is this approach enough to protect nature in the long term? Do ecological connections and long-term processes such as climate change and evolution mean that nature needs to be protected on a much larger scale?



Virginia Young, The Wilderness Society's National Strategic Campaigns Coordinator, will be the guest speaker at our next meeting where she will give a highly visual presentation exploring the journey that followed: the search for a bold new vision for protecting nature across the Australian continent.

Virginia has a diverse background having worked in the Federal Treasury for 12 years, run her own small businesses for 8 years, and been at the forefront of TWS's national forests campaigns. She was a founding member of the Australian Committee for the Earth Charter and was awarded the *Wild* magazine 'Environmentalist of the Year' in 2001.

She was also the inaugural leader of TWS's *WildCountry* flagship program, an ambitious landscape-scale, multi-stakeholder, science-based program aiming to protect, secure and restore the Australian landscape in the long term.

The meeting commences at 7.30pm on Friday 23 February at the Conservation Hut, western end of Fletcher St, Wentworth Falls.

Visitors most welcome!



The Wenlock River, Cape York. (Photo: Kerry Trapnell)

HUT NEWS

"Hut News" is the newsletter of the Blue Mountains Conservation Society Inc.
P.O. Box 29, Wentworth Falls, 2782
Phone: 4757 1872 Fax: 4757 1753
Email: bmcs@bluemountains.org.au

President: Brian Marshall

4784 1148, marabeni@optusnet.com.au

Senior Vice President: Heather Hull

4739 1493, hhull001@bigpond.net.au

Membership Secretary: Rod Quirk

4784 1711, rod.quirk@exemail.com.au

Treasurer: Bart Beech

4739 9947, bbeech@invensys.com.au

Administration Officer: VACANT

Meetings Secretary: VACANT

Meetings Convenor: Jim Wallace

4784 3305, ozblu@optusnet.com.au

Plant Nursery Manager: Kevin Bell

(ph/fax) 4787 6436, khbell@pnc.com.au

Environmental Education Officer:

Craig Linn 4751 4934,

craiginbm@optusnet.com.au

LandUse Officer: VACANT

National Parks Officer: Don Cameron

4751 1130, dontara@ozemail.com.au

Threatened Species/Bushcare Officer:

Clive Heywood-Barker 4782 3345,

ozbundu@hotmail.com

World Heritage Officer: John Haydon

0421 479 146,

jhaydonmc@optusnet.com.au

Publications Officer: Phil Davey

4758 0198, pjd@turnerfreeman.com.au

Bushfire Officer: Hugh Paterson

4751 2303, goodbush@pnc.com.au

Lithgow Regional Sub-committee

Coordinator: Chris Jonkers 6355 1179,

cjonkers@ozemail.com.au

Website Manager) David Bowskill

Technical Officer) 4757 3416

Walks Convenor) davidbow@tpg.com.au

Newsletter Editor: Juli Boddy

4759 2372, hutnews@bluemountains.org.au

Hut News on the web

Are you comfortable using a computer and the internet but still receiving your *Hut News* via Australia Post?

If so, please consider the following advantages of getting *Hut News* from the website:

- It is available at **least a week sooner** (it takes time to print, envelope and deliver the printed version).
- It is in **colour with much higher definition pictures**
- It **helps the finances of the Society** by saving in printing and mailing costs.
- It **saves the limited time of the volunteers** who envelope, address and post the printed versions.

If you decide to forego the printed version, please inform Rod Quirk, on 4784 1711 or rod.quirk@exemail.com.au.

You will be notified by email when each new issue of *Hut News* becomes available on our website below.

David Bowskill, Website Manager
Juli Boddy, Hut News Editor

Letter of the Month—February 2007

CAP COAL FROM NEWCASTLE

With NSW State elections looming, we are focusing this month on pressuring State politicians for policies to reduce carbon emissions resulting from coal mining.

"Newcastle City Council has called for exports from the world's biggest coal port to be capped at existing levels. They have recommended that the State government establish an enquiry into the environmental, social and economic sustainability of the coal industry and place a moratorium on approvals for new coal mines in NSW until the enquiry was completed" (SMH 9.11.06).

The Prime Minister continually argues that Australia's contribution to global warming is so small at 1.4 % that we can ethically continue with our present rate of emissions. However, Australia is the biggest coal exporter in the world, holding 30% of the market. *"Last financial year Newcastle (alone) exported a record 80 million tonnes of coal – worth about \$21 billion in climate change damage, calculated on the basis of figures in Britain's Stern Report on global warming"* (Sydney Morning Herald 9.11.06).

In NSW the Land and Environment Court recently delivered a decision requiring the NSW Government to consider the climate change implications of the proposed coal mine at Anvil Hill. The flow-on effect of this decision will be that future development applications will be required to include an assessment of all greenhouse gases (SMH 7.12.06).

"The court's judgement is a timely reminder that Australia's resources boom is not without cost to the entire planet" (SMH editorial 30.11.06).

"The NSW Premier Morris Iemma has said in the past that the coal industry was part of the NSW economy and the jobs and incomes it produces had to be weighed up against environmental and social concerns" (SMH 9.11.06). However on 10.11.06 he is quoted as saying *"The need to act on climate change and greenhouse gas emissions is clear"* (SMH 10.11.06).

Send a short message to your State Member of Parliament using some or all of the following points:

- It is time Australia pulled its weight in combating greenhouse gas emissions. We must join with other nations to reduce pollution and phase out "dirty" industries.
- I, as an Australian citizen, am willing to pay more right now for clean, green energy from new renewable sources, because, in the long run, clean coal will cost more and we can't go on polluting the atmosphere in the meantime.
- I support the citizens of Newcastle in their call for a cap on coal exports at existing levels.
- I call on the Premier to plan for an energy future for NSW with diminishing reliance on coal power and more investment in renewable energy.

Contact Details: Post to Parliament House, Macquarie St, Sydney 2000, or email: Bob Debus MP: bluemountains@parliament.nsw.gov.au

You might like to send a copy to the Premier thepremier@www.nsw.gov.au and Leader of the Opposition peter.debnam@parliament.nsw.gov.au as well.

Rosemary Lathouris and Robin Mosman

BMCS Bushcare

The Valley of the Waters Bushcare group works in the Blue Mountains National Park at Wentworth Falls on the 2nd Saturday of each month.

Tools are provided but bring morning tea, gloves and drinking water. New members are always welcome. Contact Karen on 4757 1929.

Do you know of any bores?

The Groundwater sub-committee is continuing to examine the distribution of boreholes throughout the BMCC region as a basis for determining the role of groundwater in supplementing Sydney Water's piped water supply.

If you own a bore, can see a bore, or know of the existence of a bore through signs on properties or even hearsay, please send information to Lisa Scott-Smith on 4734 8542 or e-mail at graemess@exemail.com.au.

Visit the BMCS website at: www.bluemountains.org.au

Water Views

In the November *Hut News* Rosemary Morrow showed how water consumption can be reduced by minimizing personal use and by recycling untreated grey water (waste from shower, basin, bath and washing machine) around the home.

Grey water may be diverted by a licensed plumber for subsoil (garden) use without Council approval. However, treatment and storage of grey water for other purposes such as flushing toilets or car washing requires Council permission. The alternatives to formal storage connected to dedicated plumbing involve retaining water in the bath or shower (if suitably designed), and informally diverting washing machine and perhaps dishwasher outflows to suitably sized containers. In each of these cases, re-use typically requires a significant amount of bucketing.

In the December issue Lyndal Sullivan and Rosemary discussed “institutional recycling” which they defined as an institution accepting and cleaning grey water, before releasing it to the environment or piping it to customers for limited uses.

Institutional recycling of grey water is expensive and commonly impracticable other than for large (commercial/industrial/education) sites or new subdivisions. This is because the process necessitates installation of dedicated sets of pipes for transporting grey water from houses to a recycling plant and returning treated grey water to homes. These external (to the home) costs exceed other options discussed below and involve major disruption within well-established communities. Furthermore, to allow recycled grey water to be piped to the cistern, washing machine, and other points in the home where it might be useable, there are internal costs related to dedicated grey water plumbing and deployment of differently coloured taps to distinguish drinking water from non-potable grey water.

Reticulated potable recycling (RPR; sometimes called “indirect potable recycling”) is a much better alternative. RPR involves treating water from the sewerage treatment plant (including secondary treated storm water and sewerage ready for discharge to the ocean) by means of “state of the art” water treatment in a Membrane Reverse Osmosis plant, including micro filtration pre-treatment and ultraviolet light post-treatment steps. Water from such a plant is very pure and has a risk of infection of about 100 thousand to a million times less than from our current tap water; that is, RPR water is at least a hundred thousand times more safe.

The RPR product can be recycled to a reservoir, where it becomes heavily diluted by catchment-derived rainwater. This blended water, after re-treatment to improve the quality of the dominant rainwater component:

- ◆ Can be distributed to users through the existing pipe network (i.e. it doesn't require a separate delivery network).

- ◆ Can be used straight from the existing taps (i.e. it doesn't require dedicated plumbing and different coloured taps).
- ◆ Can be used for drinking and cooking in exactly the same way as your current tap water (unlike untreated grey water).
- ◆ Is more convenient for the physically and/or mentally challenged members of the community (i.e. it doesn't require bucketing and there is no risk of drinking from the wrong tap).

RPR water has been used for many decades in city water supplies in Europe and USA. In comparison with desalination, the capital cost is lower because the water treated is far less corrosive, and the running costs are also lower. This is because the total dissolved solids in seawater are 35-350 times greater than the feed to the proposed reverse osmosis plant, so the power cost to remove them by desalination is at least 3 and up to 6.25 times greater. Inevitably, this higher power consumption for desalination induces an equivalently higher environmental impact through greenhouse gas production. But the over-riding benefit is that most of our precious water gets reused and we become less reliant on catchment rainfall.

Is it safe? Most definitely yes! Reverse Osmosis removes hormones, pesticide residues, organic molecules and chemical species as tiny as sodium ions. The product is purer than your current drinking water.

Is it expensive? It is much cheaper to produce than desalinated water. Desirably, sewerage treatment plants and RPR units should be sited to avoid excessive pumping distances.

Is there a power disincentive? There is a power cost, but it is small. At a consumption of 285 litres per person per day (average for detached dwellings in 2003, or 3.5 times Rosemary's daily consumption), the power cost per year of the water consumed would be between 15% and 25% of the cost of running a 300-litre (6-star rated) refrigerator.

What about rainwater tanks? Sydney has about 1.5 million freestanding homes. Simplistically, the \$2,510 million cost of a 500 ML/day desalination plant could instead pay \$2,510 up-front towards plumbing-in a tank in two-thirds of the freestanding houses in Sydney. The running cost of the desalination plant, at approximately \$165 million a year, could subsidise an additional 65,000 tanks per year. Plumbed-in tanks provide more water at less cost than desalination (the worst option!), but they are less efficient and less environmentally effective than RPR because they depend on rainfall, are not suited to every home, and the water, unlike recycling, is used once and thrown away.

Of course, if the ‘treasury’ can afford it, plumbed-in tanks together with RPR is ideal.

The information in this article is derived from a critical review of the Sydney Metropolitan Water Plan by the Society's Groundwater Subcommittee. The complete review is now available on the Society's website.

**Ian Ernst,
Groundwater Subcommittee**

WHAT DO YOU PAY FOR WATER?

More than \$1000.00 per kilolitre?

Less than \$1.85 per kilolitre?

Bottled water from a retail outlet (e.g. supermarket or garage) typically costs upwards of \$1000.00 per kilolitre (1000 litres). For example Franklins® spring water was “on special” at Woolworths in January for \$5.48 for a 6 x 600ml pack. This is equivalent to \$1,522.22 per kilolitre. Noble Water Pureau® sells at \$2.68 for 2 litres, that is \$1.34 per litre or \$1,340.00 per kilolitre.

Drinking water from your tap will cost between \$1.20 and \$1.85 per kilolitre until 2009 depending on how much you use.

Is bottled water worth more than a thousand times the cost of tap water?

If you know people who buy bottled spring/bore water, tell them about the price differential. Then suggest they consider the

environmental costs not included in the bottled-water price. For example, the damage inflicted on creeks, swamps and their dependent ecosystems due to commercial bottling of spring/bore water, and the pollution and resource consumption linked to the manufacture and disposal of plastic bottles.

Still unconvinced?

Suggest that they do a blind taste test and see if they can distinguish between bottled water and tap water.

Clue?

The bottled water should be the one that leaves a sour taste in their mouths through a hole in the hip pocket!

**Ian Ernst,
Groundwater Subcommittee**



Advance Notice of AGM *The Blue Mountains Conservation Society's Annual General Meeting will be held on 30 March 2007 when members will elect the Management Committee for the next 12 months*

INFORMATION NIGHT

**Wednesday
21 February
7.00 pm
Mid Mountains
Community Centre,
Lawson.**

What does being on the BMCS Management Committee, or one of the Subcommittees, involve?

The Management Committee, with the aid of various Subcommittees, guides the activities of the Society and makes important decisions which could affect you as members.

The page opposite contains a list of executive positions, along with brief details of what each position involves. Nomination forms will be sent out with the official notice of the AGM next month. However, to better inform you of the operations of the various committees, and hopefully to stimulate your interest in becoming a part of them, we are holding an informal information night on Wednesday 21 February.

We would greatly welcome your participation.

The following week, we will be holding an information night just for women—see below for details.

Women in the Society

The Society needs women in our committees and we want to support women to take on leadership roles.

Women have made major contributions to Blue Mountains Conservation Society's activities since its inception in 1961. Early minute books reveal that men held the key positions in the Society, yet we know from members' stories that women were active and supported the men in these positions. Women have been involved in environmental research and advocacy in the past and, as women's opportunities have opened up, more women are taking on leadership roles in these fields.

The Society needs women with a range of skills. With or without formal qualifications and relevant experience, we can all make a useful contribution. Caring about the Blue Mountains environment and wanting to make a difference, in its protection and regeneration, are the only requisites to become involved. Skills and knowledge can be learnt in the committees.

Women members with work experience in the environmental sciences and in land management are encouraged to become involved. For the rest of us, the "University of Life" has given

us numerous skills, many of which we are unaware, and there are many things we can do and learn.

Committee life offers an opportunity to make friends, to acquire skills and knowledge, and to experience a sense of achievement.

Are you interested in joining BMCS committees or helping with activities? If so, then we would like to meet you.

Women members are invited to attend an information evening where current and past committee members will explain some basics about how the Society works. We will brainstorm a list of skills and information needed to help us in committee life.

A delicious supper will be served.

WOMEN'S INFORMATION NIGHT

**Monday
26 February
7.00 pm
Mid Mountains
Community Centre,
Lawson.**

Heather Hull, Juli Boddy, Christine Davies, Lyndal Sullivan, Meredith Brownhill (Call 4782 4823 after 5pm)

Your Chance to help the Grose Valley

The Grose Valley needs our help after the November 2006 fires. Some of the burned areas in the valley are starting to regenerate, others are bare, having lost soil and seeds. All these areas are very vulnerable to weed seeds moving in and germinating. Native plant regeneration can also be damaged by people walking around.

Over the next few months it is the time to put extra effort into areas immediately upslope of burned areas to ensure that weed seeds do not spread down the creeks and onto the bare soil.

In March 2007 the Great Grose Weed Walk program will be concentrating on weeding the 'buffer areas' to burned parts of the Grose Valley. There will be full day and half day events during March and April.

Some highlights will be:

Sunday 11th March - Hat Hill Creek Blackheath -

Sunday 25th March - Braeside, Blackheath

Saturday 31st March - Canyon Colliery, near Bell

Another event will be working in an area recovering from the January 2003 fires where weeds have spread into Blue Mountains Swamp areas which are known habitat of the endangered Blue Mountains Water Skink and Giant Dragonfly.

Thursday 15th March - Wentworth Falls swamp (off Yanko Ave)

The program is a coordinated effort between National Parks, Council and volunteer Bushcare groups. For more details of these events or the whole program, or to register for an event, contact Vanessa Richardson on 4787 3112 or email vanessa.richardson@environment.nsw.gov.au.



Lyndal Sullivan

Two photos of the Blue Gum Forest which was burnt in last November's bushfires in the Grose Valley.



BMCS — MANAGEMENT COMMITTEE DUTIES AND RESPONSIBILITIES

APRIL 2007 TO MARCH 2008

EXECUTIVE POSITIONS

The following office bearers comprise the BMCS Executive.

Executive members attend monthly Management Committee meetings, and other meetings as needed. Additional personal time is needed to effectively handle the responsibilities. A guide to the total number of hours per month (hpm) is shown in brackets after each position.

President (20 hpm)

- Provides leadership and direction for BMCS
- Chairperson for BMCS meetings
- Spokesperson for BMCS

Senior Vice-President

Second Vice-President

(two positions, each 15 hpm)

- Deputises for the President as required
- Takes responsibility for one or more nominated major projects
- Undertakes business arising at meetings, assists sub-committees when required
- Welcomes members and visitors at monthly meetings, assists with name tags and attendance book.

Administration Officer (30 hpm)

- Receives and distributes incoming mail from post and email
- Prepares monthly schedules of correspondence – inwards and outwards
- Manages office, including files, archives, stationery supplies, computer and other office equipment

Meetings Secretary (15 hpm)

- Prepares meeting agendas and minutes.

Membership Secretary (35 hpm)

- Initiates programs to attract new members to the Society
- Keeps membership records
- Sends welcome letters to new members
- Sends renewal notices, follows up members who become unfinancial
- Removes unfinancial members from membership
- Provides monthly membership report
- Arranges printing and postage for each member mail-out
- Deposits membership fees
- Maintains Bushwalkers' sub-group insurance and attendance records

Treasurer (10 hpm)

- Responsible for BMCS finances
- Responsible for BMCS insurance
- Pays accounts and deposits receipts
- Provides monthly financial report
- Arranges audit for AGM

Land Use Officer (40 hpm)

- Convenes land use sub-committee
- Monitors changes to land use/ planning legislation
- Monitors developments and impacts
- Prepares submissions
- Initiates campaigns on key issues

Newsletter Editor (30 hpm)

- Liaises with existing and potential Hut News contributors
- Edits/produces 12 newsletters per year

Publications Officer (35 hpm)

- Advertises monthly meetings in the BM Gazette
- Attends monthly meetings and publishes a review in Hut News
- Takes photographs of key BMCS events, locations, people etc
- Provides website with news and views
- Prepares sundry publications for distribution
- Writes a monthly column for the BM Gazette with input from everyone

Web Site Officer (12 hpm)

- Maintains BMCS website
- Updates content of website monthly and as required
- Designs and codes new web pages
- Manages web hosting account
- Advocates for acquisition of new communication technologies as appropriate

Meetings Convenor (10 hpm)

- Arranges speakers for each monthly meeting, after discussion with Management Committee
- Arranges hospitality, welcome, introductions, gift and supper for speakers

Environmental Education Officer (15 hpm)

- Responsible for education program
- Liaises with BMCC to promote community env. education
- Convenes env. ed. sub-committee
- Prepares publications, workshops, activities to inform the community about nature and conservation issues

Plant Nursery Manager (30 hpm)

- Responsible for overseeing operations of the Blackheath and Lawson nurseries.
- Purchases nursery materials
- Collects and maintains a seed bank of local plants
- Arranges sales and contracts for plants with government and private individuals
- Promotes the use of Australian plants in private and Council gardens
- Manages nursery financial affairs

Bushcare Officer (15 hpm)

- Liaises with NPWS, BMCC and other bushcare groups
- Represents BMCS at Bushcare Network meetings
- Advises on Bushcare issues

National Parks Officer (15 hpm)

- Liaises with NPWS about parks management matters
- Lobbies to advance and enhance conservation in, or impacting on, national parks
- Campaigns for inholdings acquisitions
- Campaigns for parks/WHA additions

Threatened Species Officer (15hpm)

- Deals with threatened species issues and prepares submissions etc.
- Promotes threatened species conservation
- Represents BMCS on the BM Threatened Species Recovery Team

World Heritage Officer (15 hpm)

- Lobbies for WHA management funding
- Monitors/comments on WHA management
- Identifies/campaigns for WHA additions

Project Officers

(multiple positions, each 10 hpm)

- Takes responsibility for nominated major projects and business arising at Mgt Committee and general meetings

Non-Executive Positions:

Public Officer (0.1 hpm)

- Contact point between BMCS and Department of Fair Trading.
- Ensures that annual returns are filed with Dept of Fair Trading

Bushfire Committee Rep. (5 hpm)

- Represents NCC on BM Bushfire Mgt C/tee and Risk Mgt Sub-C/tee.
- Attends appropriate NCC workshops

Walks Convenor (10 hpm)

- Organises and publishes walks program
- Markets the walks program to members and non-members
- Convenes leaders' meetings bi-annually

Management Committee

Meeting Arrangements

Mid-Mountains Community Centre,
Lawson, 9am, Saturday prior to last
Friday of the month.

Annual General Meeting

Conservation Hut, Wentworth Falls
7.30 pm, Friday 30 March 2007

The Botanical and Ecological significance of the Newnes Plateau

This article was provided by Karen McLaughlin, a member of one of our subcommittees campaigning for the protection of the Newnes Plateau and Western Escarpment, comes from a text by Doug Benson (*Botanic Gardens Trust*, 21 September 2006).

The following is a brief assessment of some aspects of the botanical/ecological significance of the Newnes Plateau vegetation based mainly on my experience in 1980s during vegetation mapping of the area (Benson and Keith 1990), and occasional subsequent visits.

Physiography

The Newnes Plateau is the highest area of the Triassic sandstones in the Blue Mountain and ranges from 1000 to 1200m high, with limited areas above 1100m. The areas are cold, cold enough for areas of Snow Gum Woodland. Rainfall is about 900-1000 mm pa with highest rainfall at the Clarence end.

Biodiversity

The main vegetation is Sydney montane sclerophyll forest of Keith (2004), (*Eucalyptus dives* *E. pauciflora* *E. oreades*) with a shrub understorey and groundcover of prostrate shrubs and sclerophyll sedges. There are also extensive areas of heath and mallee, (the largest areas of heath in the western Blue Mountains according to Wilkinson et al 2006). There are also Newnes Plateau sedge-swamps, listed as an Endangered Ecological Community under the NSW TSC Act.

The Newnes Plateau area includes a high number of rare plant species (a provisional list is below). The reasons for the high numbers of rare plant species may be that the area functioned as a refugial area during past drier periods. The high number of prostrate plant could possibly have their origins in glacial times (20,000 years bp) when there was a more open shrubland, subsequently invaded by eucalypts, particularly the southern end towards Clarence where rainfall is probably higher, and plateau soils deeper.

Some significant Newnes Plateau plant species

Sydney Montane sclerophyll forest

Persoonia hindii

Isopogon prostrates

Banksia penicillata

Micromyrtus sessilis (prostrate form)

Newnes Plateau sedge-swamps

Boronia deanei

Dillwynia stipulifera

Olearia quercifolia

Celmisia longifolia

Notochloe microdon

Heath and mallee

Eucalyptus gregsoniana (heathy balds)

Eucalyptus laophila (pagodas)

Dianella sp nov

Future climate change refugia

Apart from biodiversity I think the area is ecologically significant as the as the highest and coldest part of an elevational sequence of sclerophyll forests and woodland habitats directly contiguous with the Wollemi Wilderness and GBMWH area.

The importance of maintaining intact natural landscapes with substantial gradients of temperature and rainfall will be particularly significant in the context of future climate change, which is likely to result in higher temperatures and lower rainfall. The Newnes Plateau, with its higher elevations,

regionally lower temperatures and higher rainfall, but with generally similar soil and nutrient conditions to the surrounding landscapes, is positioned at the mesic end of the temperature/moisture gradient. It vegetation community and habitats are likely to be part of a future natural refuge area, allowing local populations of species which are depleted, or die out in the drier conditions elsewhere to persist there.

Additionally, provided that all the natural stages and links along the gradients are maintained, (as should be possible in large scale conservation areas), natural movement of fauna and mobile plant species (eg. by seed) will take place, allowing natural adjustment to the changing climate conditions. The limited high elevation areas in the GBMWH Area, including the Newnes Plateau, are likely to be very important components for the survival much of the biodiversity of the broader landscapes, and need to be particularly protected.

Current condition of Newnes Plateau vegetation

While many areas of the Newnes Plateau have been damaged in the past, much of these areas can be rehabilitated. The main past uses of the plateau have been mainly by Forestry, and the major impact has been the clearing for pine plantations. Important Newnes Plateau Swamps, however, have survived in many of the plantation areas, and development of larger buffer areas around these swamps with native shrubs such as *Leptospermum* rather than planting pines right to the swamp boundary, particularly when the next generation of pines are planted, would help maintain the swamp vegetation and their function as corridors for fauna.

While clearing for pine plantations has severely damaged large areas of the Plateau, most of the logging carried out in the native forest areas has done little long term damage. Certainly structural changes have altered the look of the forest but the understorey is still considerable, and the canopy trees are resilient; there is plenty of evidence of seedling recruitment of most species. In particular there is very little invasion by exotic weed species.

Underground mining while possibly impacting on the swamps through changes to water movement, is unlikely to impact substantially on the woodland and forest areas. Sand extraction will obviously impact directly on some areas of vegetation, and significant areas of rare species and vegetation should be taken into account when future areas are proposed for mining.

Conclusion

The biodiversity values of the Newnes Plateau and its high elevation areas are significant and should be part of the formal conservation system. To my knowledge there has been no recent comprehensive survey work to look at the distribution of the significant flora and vegetation, or more importantly to evaluate future conservation of the area in the context of climate change as discussed above.

References

- Benson, D.H. and Keith, D.A. (1990) The natural vegetation of the Wallerawang Map sheet. *Cunninghamia* 2(2): 305-335.
- Keith, D.A. (2004) *Ocean Shores to Desert Dunes: the native vegetation of New South Wales and the ACT*. Dept of Environment and Conservation (NSW).
- Wilkinson, M.T. and Humphreys, G.S. (2006) Slope aspect, slope length and slope inclination controls of shallow soils vegetated by sclerophyllous heath - links to long-term landscape evolution. *Geomorphology* 76: 347-362.

On our bushwalks, please tread softly and take only memories away with you

As we look forward to a new year packed with opportunities to get out and enjoy our beautiful Blue Mountains, the Society's bushwalk leaders would like to remind us that we should do all we can to preserve this unique and fragile environment. The best way to do this is to abide by the principles of minimum impact recreation endorsed by the National Parks and Wildlife Service.

When walking:

1. stay on the track
2. avoid walking on sensitive vegetation by staying on hard ground wherever possible and avoid easily eroded soils – delicate vegetation is easily damaged by tramping
3. don't walk around wet areas on the track – this just widens the bog area
4. keep group size small so that you won't have a significant impact on the environment
5. use fuel or gas stoves rather than wood fires, and *always* comply with firebans
6. where there are no toilet facilities, bury human waste at least 100m away from watercourses at a depth of 15cm or take it with you if possible
7. leave the bush as you found it – don't pick flowers, or break tree limbs (even if you think the wood is dead it provides an important habitat for many insects and other animals)
8. take a look around before you leave lunch spots and camping areas to check that you haven't left any signs of your use
9. take all your rubbish with you, including organic waste such as apple cores and citrus peel, and do the right thing and collect any other rubbish you see on the way
10. at the end of each trip take a moment to think about ways you could lessen your 'footprint' even more on your next walk

To find out more about treading softly in NSW National Parks, visit the NPWS website at:

www.npws.nsw.gov.au/parks/index.html.

Nursery News Kevin Bell

New Year greetings from all the nursery volunteers and we look forward to renewing contact with our regular customers and meeting new ones.

The Blackheath and Lawson nurseries re-opened on 16th and 17th January with many special offers which will extend all through February. We have a large selection of wattles and hakeas for \$2 (normally \$2.50) and all eucalypts are just \$1! With a plant from our 'Free-box' for every four purchased, there are bargains galore so come along and have a look!

We will also be returning to the Magpie Markets at Lawson on Sunday 18th February.

As usual, check our web-site for nursery locations and opening times and a complete plant list.

Pea-plants

We continue our review of pea-plants with *Pultenaea*, the largest genus of pea-plants in Australia with over 100 species. They were named after Richard Pulteney (1730-1801), an English surgeon and botanist, most famous as the first biographer of Linnaeus (1707-1778), the Swedish botanist who devised the binomial system of plant nomenclature still in use today. *Pultenaea* species, like many pea-plants with yellow and red flowers, are commonly known as 'eggs and bacon.' Several species grow in the Blue Mountains and we propagate three in the nursery.

P. daphnoides, so named because its leaves resemble those of Daphne, is commonly called the Large-leaf Bush-pea. It is an attractive shrub to 2-3m, flowers in spring and is suited to sheltered or shady positions. *P. scabra*, as the name implies, has rough leaves and

bears a profusion of flowers throughout spring and summer and grows to about 1m. *P. flexilis*, the Graceful Bush-pea, is the largest of the three. A graceful shrub to 3-4m with a weeping habit, it flowers in spring and is an excellent screen plant. Large tracts grow along the fire trail at the base of Mt. Banks. All three species are frost resistant and attract butterflies as well as parrots who like the seeds.

New *Banksia* available

We continue to add new species and are always open to suggestions for inclusion, particularly if seeds/cuttings can be supplied of local plants.

One outstanding new addition is *Banksia penicillata*, whose range is limited to a few locations around Newnes and the Wolgan Valley. It was formerly considered a variety of *B. conferta* but is well separated from the closest occurrence of *B. conferta* var. *conferta* on the Lamington Plateau in Queensland. It is possible that these two plants are derived from a common ancestor, an example of how natural selection can operate to produce new species when there is enough geographical separation. The Newnes population was first observed in 1906 but has been neglected since then, being confused with *B. paludosa*.

It is a small tree to 4m, with no lignotuber, but with spectacular flower cones up to 20cm long. In autumn, these are initially yellow-grey, then assuming a purplish tinge and changing to brown with maturity.

I have four specimens in my garden and after six years they finally produced fertile seeds from which the nursery specimens are derived.

Local seeds

Restrictions placed on seed collection in National Parks, Crown and other

Public Lands often make it difficult for nursery volunteers to collect adequate quantities of local seed for propagation.

While volunteers have extensive gardens of local plants, we are looking for other members of the Society who may have large bush-blocks and would be willing to either collect seed themselves or allow volunteers onto their land for such a purpose.

We would welcome your help. Contact Kevin Bell on 47876 436 or khsbell@pnc.com.au.

Forestry tubes

Do you have any forestry tubes at home? The nursery likes to re-use these tubes (which cost us a little over 7c each) and as an incentive we offer 15c off your next purchase for every clean and intact tube returned to us.

So, if you have any, please bring them along. It's good for you, it's good for us and it's good for the environment.



Pultenaea daphnoides, the Large-leaf Bush-pea

(Photo: R.Hill,
Australian National Botanic Gardens)

BLUE MOUNTAINS CONSERVATION SOCIETY BUSHWALKING GROUP

Membership of the bushwalking group is open to Society members. Cost of insurance and affiliation fees is \$15 per member.

For further information, contact the Walks Convenor, David Bowskill (4757 3416, davidbow@tpg.com.au).

BEFORE ATTENDING, PLEASE DISCUSS THE WALK WITH THE LEADER (listed below)

- THIS IS ESSENTIAL IF THIS IS YOUR FIRST WALK OR YOU ARE UNSURE OF THE CLASSIFICATION.

MONDAY LEISURE WALKS

Usually 'Short Day' walks of 3-5 hours, suitable for walkers of average fitness. Graded MEDIUM, these walks may include some short rock scrambles or sections off track. Bring morning tea and lunch. Carry at least 1 litre of WATER, 2 litres on warm days.

Feb-12	Thor Head, Mt. Victoria <i>Views over Grose Valley. EASY/MEDIUM</i>	Ron	4757 1526	Mt Victoria Station	8.30am
Feb-19	River Lett swimming hole, Hartley <i>Leisurely walk and swim. EASY</i>	Marie	4787 1257	Mt Victoria Station	8.30am
Feb-26	BUS TRIP to Deep Pass, Wollangambe <i>Not to be missed! Fare \$10, pay when booking. MEDIUM</i>	David	4757 3416	Bus depot, South St, N. Katoomba	8.30am
Mar-5	Erskine Creek via Glenbrook <i>Mountain creek waterhole. Swim. EASY</i>	Heather	4739 1493	Glenbrook Station carpark	8.30am
Mar-12	Nature Trail, Wentworth Falls <i>Walk part of Grand Cliff-top Walk/Valley of the Waters. EASY</i>	Laurel	4784 1554	Went. Falls, Stockyard carpark	8.30am

THURSDAY PLEASURE WALKS

EASY to MEDIUM grade walks conducted to suit walkers on the day. Slower walkers are catered for; on longer walks there may be an option for a slower group to complete only a section of the walk. Carry at least 1 litre of WATER, 2 litres on warm days.

Feb-15	Gordon Falls to Laura Cascades <i>Cliff top walk with varied scenery on bush path. Car shuffle to return. EASY</i>	Joan	4782 2218	Cnr. Laura Mall and Megalong St.	9.30am
Feb-22	History of Lyrebird Dell with John Low* <i>Learn about the Aboriginal and early European history of Lyrebird Dell from BMCC local historian, John Low.</i>	Simone	4757 3416	Cnr. Laura Mall and Megalong St.	9.30am
Mar-1	Water Nymph's Dell <i>Delightful walk into rainforest gully. Some scrambling, steps to climb out. MEDIUM</i>	Simone	4757 3416	Went. Falls carpark (near clock)	9.40am
Mar-8	Collier's Lookout, Blackheath <i>Walk from Porters Pass to Colliers Lookout past Buddhist Monastery and return. EASY</i>	Marie	4787 1257	Blackheath Neighbourhood Centre	9.40am
Mar-15	Witch's leap, Furber Steps, Boardwalk <i>Descend into the rainforest for lunch, return via Scenic Railway. MEDIUM</i>	Joan	4782 2218	Gearins Hotel, Katoomba	9.30am
Mar-22	BUS TRIP to Mt Tomah Botanic Gardens <i>Cost: \$12 including entry. Bookings now being taken. EASY</i>	Simone	4757 3416	Bus depot, South St, N. Katoomba	8.30am

WEEKEND WALKS

Before attending, please discuss the walk with the leader or the Weekend Walks organiser, Jim Percy (4758 6009). Carry at least 1 litre of WATER, 2 litres on warm days.

Feb-10	Sassafras Gully MEDIUM	Ron	4757 1526	Springwood Station carpark	9.00am
Feb-17	Mt Wilson-Wollangambe Canyon MED	Meredith	4782 4823	Mt Victoria Station carpark	9.00am
Feb-24	Wonderland Track-3 Brothers EASY/MED	June	4787 7312	Hydromajestic, Medlow Bath	8.30am
Mar-3	Murphy's Glen EASY/MEDIUM	Bob	4758 8545	Woodford Station	9.00am
Mar-10	Linden Ridge, Dawes Ridge circuit HARD	Jim	4758 6009	NP entrance, Glossop Rd, Linden	9.00am

Missing your favourite walk?

If you would like to lead a walk, or if you haven't seen your favourite walk on the program for a while and you're not confident to lead it yourself, let me know and I will try to get someone to lead it with you. Jim - phone 4758 6009 or email jp34@tpg.com.au.

Plant Study Group

There are vacancies in our Plant Study Group as we enter our third year. The last two years have been fun, interesting and with challenging moments as we identified plants.

On a warm, misty morning in December we walked in Red Gum Park, Bullaburra looking for orchids and much to our delight we found a colony of *Caleana major* or Flying Duck orchids. With their red-brown flowers they all grew in a perfect circle around a single *Eucalyptus piperita*. This shows their association with fungi or mycorrhiza which inhabit the root zone of plants. It also shows just how important one tree can be.

We aim to teach ourselves about native plants by learning the botanical structures of flowers, leaves and fruits, and by using botanical terminology and keys. Some familiarity with local plants in 'Native Plants of the Blue Mountains' by M. Baker & R. Corringham is a good starting point.

Each month we visit a different plant community and location in the mountains. Our short rambles in the bush are on the first Sunday of each month.

Phone Meredith on 4782 4823 after 5pm.

SUMMER HAIKU

Falling water –
the flies more interested
in my sweat



Ingar picnic area

The sound of sirens
winding up the dry ridgetops –
bushfire season



Sharing the moment
the water-dragon and I
by a shallow pool



Diana Levy

Lithgow (Dragan's place)

MEMBERSHIP ENQUIRIES — Rod Quirk

Phone: 4784 1711, Email: rod.quirk@exemail.com.au

Or write to: PO Box 29, Wentworth Falls 2782