

Water Quality, Macro-invertebrates, Giant Dragonflies

At our monthly meeting on Friday 30 April aquatic environmental scientists Geoffrey Smith and Danielle Birkbeck will discuss the importance of the total water cycle in today's global society as well as water management within the Blue Mountains. Caroline Dearson of the Sydney Catchment Authority will talk about the Giant Dragonfly.

Fresh water is a critical resource in the transition to a sustainable future. As it courses through the hydrological cycle, water is the life-blood of food production, commerce, human needs and innumerable aquatic ecosystems. Water resources are finite while water demands are increasing dramatically, driven by the relentless growth of human activity in recent decades. Thus there is a greater need for water management both globally and locally.

Blue Mountains City Council is currently undertaking two water quality monitoring programs at key sites within the Blue Mountains LGA. The first is part of the Recreational Water Assessment and Management Program run by the Department of Infrastructure Planning and Natural Resources. Surface water is tested to detect levels of bacteria, blue-green algae and other attributes which affect the suitability of the water for swimming and other recreational activities. The second water quality monitoring program involves macro-invertebrate sampling at 45 sites across the Blue Mountains. Individual creeks and streams can be given a health rating based on the number of individuals and diversity of species within that creek.

Caroline Dearson of the Sydney Catchment Authority will tell us about the Giant Dragonfly, *Petalura gigantea*. In January this year some of our bushwalkers were fortunate to witness a special natural event, the presence and mating of Giant Dragonflies in swamps near Mount Hay. The larvae of these dragonflies don't swim around in ponds and streams like other dragonflies. They are nocturnal predators and make a permanent burrow in suitably soft ground/swamp/bog/mud and live much like a trap-door spider, catching small animals as they pass the entrance. *Petalura gigantea* is listed as endangered under the Threatened Species Conservation Act in New South Wales.

The monthly meeting at the Conservation Hut, Wentworth Falls, on Friday 30 April starts at 7.30 pm. Visitors are very welcome.

Council Votes to Protect Creeks

Congratulations to the BMCC Councillors who voted to improve the protection of creeks, swamps, heaths and other special areas in the Blue Mountains at their meeting on 9 March.

In all future subdivisions there is now a guideline for owners and developers regarding the required width of buffers of natural bushland to be retained around creeks and significant vegetation communities. These policy guidelines are in the new Better Living Development Control Plan 2004, which is expected to be gazetted in the next few weeks.

Members will recall that the Society has actively campaigned to have quantitative measures included in planning policies to ensure better protection of the natural environment. A default buffer of 60 metres wide has now been established around sensitive vegetation communities (such as Rainforests and Blue Mountain Ash Forests). In addition, a default buffer of 20 metres wide has been established Whilst these around watercourses. buffers may be varied, if justified by a detailed site assessment, it will at least establish these widths as benchmarks.

The 60m buffer width proposal arose

out of a detailed field survey conducted by Drs Peter & Judy Smith in 1997 on behalf of a number of local environment groups including the Society. They assessed the extent of degradation on the edge of 50 residential areas across the mountains. They concluded that to protect any special areas there was a need to leave at least 60m of bushland in good condition around them to act as a buffer against degradation by nearby development.

This amendment to the DCP along with several others will greatly enhance the protection of our natural heritage in the Blue Mountains. Council is to be congratulated in adopting this long overdue change. *Alan Harris, Land-use Sub-committee*.

John Buki Garden

On Saturday morning, 10 April, while the plant sale is on, there will be a working bee in the John Buki Garden (the area enclosed by the circular drive at the Conservation Hut).

If you can spare some time to help with weeding and planting please bring gloves. Tools will be provided.

Wilderness 🧨 🗸

Jenny Rich The Butterbox area near Mount Hay which is proposed for filming of part of the Fox Studio/AFG Talons Production movie "Stealth" is in the World Heritage Area, Blue Mountains National Park and the declared Grose Wilderness.

Filming is planned to take place over seven days in a 12.6 hectare site which includes environmentally sensitive heath, soils and swamps which are habitat for the endangered Giant Dragonfly. The area is recovering from fire and is very vulnerable to trampling and erosion.

Proposed filming activities include use of helicopters, construction of a temporary helipad, three large camera decks, board-walk decking and generators, with 75 people working in the sensitive wilderness area and another 75 people plus equipment in the car park.

The NPWS Filming and Photography Policy specifically prohibits filming in Wilderness areas unless the subject matter is consistent with the management objectives and policies of these areas. However, the NSW Government is supporting the filming because of the money it will bring to NSW and wants to issue a special licence for the filming to proceed. There are other more appropriate sites in the Blue Mountains.

Approval of this filming in the Grose Wilderness would create a precedent for future requests for commercial filming and other inappropriate activities to be permitted in national parks and wilderness areas.

NPWS will decide about the filming proposal in the near future so please contact Environment Minister Bob Debus (107 Macquarie Road, Springwood 2777, fax 4751 1245) opposing this threat to the beautiful Butterbox area. For further information contact Ian Baird 4782 6775 or Jenny Rich 4787 6243.

Autumn Plant Sale

Saturday 10 April, 9am to 1 pm.

The Society's Autumn plant sale will take place on Saturday 10 April 2004, outside the Conservation Hut at the end of Fletcher Street, Wentworth Falls.

Most plants are either \$3 each or four for \$10. Supertubes are \$5 each. There will also be a few tree ferns in larger pots at \$15 each. Come along, support the Society, and buy your native plants to help the environment. Enquiries: David Coleby, Nursery Manager, 4784 1395.

"Hut News", the newsletter of Blue Mountains Conservation Society Inc. P.O. Box 29, Wentworth Falls, 2782 Phone 4757 1872 Fax 4757 1753 Email: <u>bmcs@bluemountains.org.au</u> Web page: www.bluemountains.org.au President: Kevin Bell 4787.6436 (ph/fx), khbell@pnc.com.au Senior Vice President: Heather Hull 4739.1493, heatherhull40@hotmail.com Second Vice President: Tony Towers 4757.1321(ph/fx) atowers@dlwc.nsw.gov.au Treasurer: Bart Beech 4739.9947, bbeech@invensys.com.au Administration Officer: Les Coyne 4757.3327, 4757.2820(fax) coyne@pnc.com.au Membership: Elizabeth van Reyswoud 4757.2694, 0418206899 (mobile) mcreysw@bigpond.net.au Meetings Secretary: Rosemary Lathouris 4757.2511, lath@pnc.com.au Meetings Convenor: Jim Wallace 4784.3305, ozblu@optusnet.com.au Education Officer: Vacant Plant Nursery Manager: David Coleby 4784.1395 (ph/fax) dcoleby@pnc.com.au Land Use Officer: Alan Harris 4757.4545, pamal8@bigpond.com Bushcare Officer: Clive Heywood-Barker 4782.3345, ozbundu@hotmail.com Publicity Officer:: Vacant Walks Convenor: Bob van Reyswoud 4757.2694 (ph/fax) mcreysw@bigpond.net.au Bushfire Officer: Hugh Paterson 4751.2303, goodbush@pnc.com.au National Parks Officer: Jenny Rich 4787.6243, jennyrich@pnc.com.au Web Site Manager: Margaret Sleath 4759.3350, msleath@ozemail.com.au Threatened Species Officer: Ian Baird 4782.6775, ianbaird@mountains.net.au World Heritage Officer, John Haydon 0421.479.146, johnhaydon@iprimus.com.au Project Officer: Ann Fox 4758.6096, foxy@zip.com.au Project Officer, Brian Marshall 4784.1148, Brian.Marshall@uts.edu.au Project Officer, Lyndal Sullivan 4782.1635, lyndal@hermes.net.au Project Officer Ron Withington Project Officer, Ron Withington 4757.3984, ronwit@ozemail.com.au Newsletter Editor: Christine Davies 4787.7246, hutnews@bluemountains.org.au **Development De-Regulation**

Just when we thought we'd saved the last surviving population of the red-eyed curly-tailed backflipper from extinction, another category of development is being foisted on us by the NSW State Government – "small" developments which can be built just about anywhere without the need for Council assessment or approval. Will our special heaths, forests and swamps suffer death by a thousand cuts by uncontrolled clearing for barbeque areas, garden sheds and cubby houses?

The new Council will be reviewing Council policy on small and standard developments to define which need no approval and those which can be dealt with by private certifiers without coming to council. The Development Control Plan which covers these matters, called Exempt and Complying Developments (DCP No 33), has been on public exhibition during March.

The developments proposed to bypass any approval system under DCP33 are called "exempt developments" and these include portable classrooms, sheds and barbeques. Those that will not require council development approval but only the approval of a private certifier are "complying developments", and are regulated through a standard set of conditions. These include single storey houses in certain zones, swimming pools and some boundary adjustments.

The Society remains opposed to both these types of development because there is no opportunity for community consultation. This means that there is no opportunity to prevent something that will be inevitably destructive.

Whilst the State Government requires all councils to provide for developments which can bypass the system for assessment and approval, it does allow councils to define exactly what those developments are to be, within limits. Council's draft plan can be commended for certain improvements, but there are loopholes.

One major concern is that not all our creek-lines are protected from clearing for either large or small developments under DCP33. Clear standards are needed to cover all situations to ensure that native vegetation remains to protect the creek-line and keep the water clean.

Thankfully the excellent mapping and zoning of creek-lines done under the draft LEP 2002 will allow those creeklines the protection they need in those parts of the City covered. The work done by council in mapping and zoning sensitive vegetation communities for protection has allowed council to restrict the exempt and complying developments from these areas also.

Members interested in discussing any aspect of this draft Council policy are welcome to contact the Land Use subcommittee through 4782 1635.

Tasmania's Choice, Tourists or Woodchips?

(Colong Bulletin, March 2004)

The world's largest remnants of temperate rainforest are in Tasmania. As temperate rainforests in other places continue to be logged, Tasmania's forests may become the only substantial temperate rainforests left. As such they will, if preserved, become, along with Tasmania's very tall trees, world famous tourist attractions.

The cosmetic strips along tourist routes do not hide logging damage. In a letter to the SMH on 19 January Wendy Harmer wrote: "There is now hardly a hillside in the whole of eastern and southern Tasmania which has not been scarred by clear felling and plantations ... and this is supposed to be the Holiday Isle. It was more like driving round a giant industrial estate ... Trucks were coming at the rate of one every four minutes ... Locals have complained of logging trucks rumbling past their houses from midnight to dawn."

At considerable personal risk green activists have opposed extensive logging in the south west forests and the Styx Valley where trees centuries old and up to 190 metres tall are being logged. The woodchip company Gunns Limited, a company whose share price has risen 900 percent in five years, does most of the logging. The woodchips are used to manufacture paper, most of which will become advertising and packaging material.

Three decades ago the Tasmanian Government acceded to the Hydro Electric Commission. Only Federal intervention saved the Franklin River. Today both the Tasmanian Government and Opposition favour Gunns. Again only Federal intervention will conserve Tasmania's natural assets. If the ALP intervenes it will secure Green preferences and probably be elected, despite the possible loss of one or two seats to Tasmania's vandal voters.

Tasmanian Forests

During the second half of our monthly meeting on 26 March Ned Sevil showed some recent slides of Tasmania's magnificent old growth forests stunning photographs of towering ancient trees, mosses, lichens, tree ferns, delicate fungi, sparkling pristine creeks (words alone do not suffice!) ... and then photographic evidence of the horrific vandalism which is taking place hillsides completely razed leaving only a mess of logs and rubble to be burnt, native animals poisoned and the ancient forests replaced by timber plantations.

One can only wonder at the violence that humans can inflict on nature!

This is a national issue! Investors on the mainland are profiting by this vandalism and Tasmanians are helpless as they watch their natural heritage being trucked away to the woodchip mill. Australians will deserve the condemnation of the world and future generations if we stand by and let this stupidity continue. *Christine Davies*.

Contact the local Forest Action Group by phoning Chris Mason 4787 1366 or Jenny Rich 4787 6243.

New Committee

At our AGM on Friday 26 March 2004 a new management committee was elected. Details are on page 2. There are two vacancies on the Management Committee—Education Officer and Publicity Officer. If you are interested in either of the two vacant positions, or would like to help in some other way, please contact a member of the management committee.

Membership Enquiries Contact Elizabeth van Reyswoud Phone 4757.2694 Email: mcreysw@bigpond.net.au Post: PO Box 29,Wentworth Falls 2782

Sydney's Sewage - What Happens to It? by Ross Coster.

Throughout Sydney, including here in the Blue Mountains, Sydney Water operates a set of 30 Sewage Treatment Plants (STP's). In the Mountains we have plants at Mt Victoria, Blackheath, Winmalee and Glenbrook. By about 2008, we will just have the one at Winmalee, as all the others are to be decommissioned, and all our sewage will then go to Winmalee and Penrith.

STP's can be loosely grouped into inland plants that discharge to creeks and rivers and coastal plants that discharge to the ocean. All up, over 1 billion litres of treated sewage effluent is released to our waterways and the ocean every day.

What is Wrong with the Coastal **Plants?** The coastal plants as they stand are pretty much a disgrace, using primitive primary treatment systems to remove some of the solids, and relying on the ocean to disinfect and dilute the effluent. The clean beaches we keep hearing about are because the effluent is discharged kilometres out to sea using tunnels under the seabed to feed diffusers. North Head STP is the worst, and only captures about 25% of solids from sewage, with the rest going into the ocean. This is bad news, because the solids in this effluent are a valuable natural resource that should be caught and re-used.

The shining light in all this is the new Cronulla Coastal STP, which uses multistage treatment to capture the solids, followed by disinfection to realise high quality effluent before discharge.

What is wrong with the Inland Plants? Inland STP's are designed to discharge effluent of a much higher quality than the coastal plants. They use a series of technologies to do this, including: screens to remove rags, sticks and plastics (to landfill); grit tanks to remove sand and grit (to landfill); settling tanks to remove solids (for re-use as fertiliser); trickling filters to remove nutrients (for re-use as fertiliser); sand filters and coagulation to remove finer particles (for re-use as fertiliser);

WIRES

Training Course for New Volunteers

NSW Wildlife Information Rescue and Education Service is a volunteer organisation dedicated to the rescue, rehabilitation and release of sick, injured and orphaned wildlife.

Blue Mountains Branch is now looking for volunteers to help in this valuable and rewarding task. You have to be over 18, with a commitment to the wildlife which does so much to enhance the unique and diverse environment of the Blue Mountains.

The next general training course will be held in Glenbrook over 3 days: Saturday 8 May (half day), Saturday 15 May (full day), Saturday 22 May (full day). Cost is: single \$88, family \$114. For more information or to register phone WIRES 4754.2946. Disinfection to kill any remaining bacteria or viruses.

While this all sounds wonderful (even if it smells a bit average!) there are problems. The Nature Conservation Council of NSW has a policy of preferring biological treatment processes over chemical ones, and I agree with them. Unfortunately Sydney Water, and in fact most water authorities, don't see things that way.

STP's use some pretty nasty chemicals, such as Ferric Chloride or Alum for particle coagulation, and Chlorine for disinfection. Some of these chemicals, or by-products of their use, ends up in the effluent stream to our waterways. Two examples that come to mind are quite infuriating.

Disinfection is typically done using chlorination followed by de-chlorination. This uses toxic chemicals, and produces by-products like Tri-Halo-Methanes, which are carcinogenic. An alternative would be to use Ultraviolet Disinfection, which uses no chemicals (but a lot of energy) and produces no by-products.

Of course the dollar wins here, as chlorine is cheaper than UV.

Settling of fine particles is done using chemical coagulants. An alternative would be to use micro-filtration though membranes. Less chemical use, better quality effluent, higher solids capture rate, less disinfection required, all using proven technology. Again, chemical coagulation is cheaper!

What Happens to the Solids? Here we have to commend Sydney Water on a job well done. Over 99% of all 'biosolids' (that's a marketing term for sewage sludge) is re-used in agriculture. In liquid form it is injected into soils to improve nutrient levels, and sprayed into pine forests to promote tree growth. In de-watered form it is spread over fields and ploughed in to improve soil nutrient levels and add organic matter.

Sydney Water have worked with the EPA to develop guidelines for re-use, and these guidelines cover things like: Soil and sludge nutrient levels; heavy metals; pesticides; and buffer zones from water bodies.

In 2002/3 Sydney Water re-used over 192,000 tonnes of sewage sludge, an impressive effort and a world leader in the field. If and when the capture rate at the coastal plants is improved we will see this amoung rise significantly over time. The down side here is that they use trucks exclusively for transport. Keep your eyes (and nose!) open for Australian Native Landscapes trucks carrying sludge over the Mountains.

What Happens to the Effluent? The effluent from Winmalee and Penrith STP's is discharged directly to the Nepean River. In dry times (like now) nearly 50% of the water flowing under Yarramundi bridge is sewage effluent. The Nepean and Hawkesbury Rivers suffer from toxic blue-green algae (actually cyano-bacteria) blooms regularly, thanks to the increased nutrient levels (although agriculture contributes here as well). We need to see far more of the effluent from these and other

DATES FOR YOUR DIARY

Monthly Meeting: Friday 30 April 7.30 pm, Conservation Hut (page 1) Management Meeting: Saturday 24 April, 9 am. Members are welcome to attend as observers. Contact Liz 4757.2694 for location of meeting.

Bushcare: Saturday, 10 April. Valley of the Waters Bushcare Group meets at 9am on the 2nd Saturday of every month. Tools are provided. Bring morning tea, gloves and drinking water. Contact Karen 4757.1929.

Autumn Plant Sale: Sat 10 April (p1) **Environment Festival:** 1-2 May (p4)

inland plants re-used in land applications, particularly where such reuse can displace use of drinking water or extractions from the river.

Next month I will tell you what Sydney Water is doing about effluent re-use. *Ross Coster*.

OAM for Environmental Work

Congratulations to Keith Muir who has received the Order of Australia Medal in recognition of his work with the Colong Foundation. Keith has played a significant role in a string of successful campaigns, including declaration of the Nattai Wilderness, declaration of the Gardens of Stone National Park and World Heritage listing for the Greater Blue Mountains.

Along Nature's Timeline

At Blackheath the mysterious little creatures (frogs?) that cheep at night in the bush and outside my bedroom window through February and March have stopped calling. Banksias are beginning to flower. Currawongs are flocking around the town and the leaves of the street trees are changing colour and starting to fall. We can look for wonderful displays of autumn leaves in April – Wentworth Street in Blackheath is worth a visit.

April marks the time for the start of the honeyeater migration. Watch for little groups of Yellow-faced and Whitenaped Honeyeaters crossing the mountains, flying at about tree-top level, heading north. Tiny Pardelotes are also passing through.

We will hear the first lyrebird calls for the winter breeding season. Greater Gliders and Bush Rats are born, yabbies moult and grow at Easter, there are lots of colourful fungi and Red Bloodwood trees flower and attract flying foxes.

So much is happening! Autumn is a great time to be observing Nature in the Blue Mountains. *Christine Davies*.

(Reference: A Timeline for the Upper Blue Mountains, compiled by Jim Smith)

Wild Watch on ABC

Wild Watch is a nation-wide survey of backyard wildlife to be launched by Richard Morecroft at 6.30 pm, Saturday April 3, on ABC TV.

There is an on-line survey that will contribute to biodiversity research and conservation on <u>www.abc.net.au/</u>wildwatch.

BLUE MOUNTAINS CONSERVATION SOCIETY BUSHWALKING GROUP Environment Festival 2004

The Blue Mountains Environment Festival will be held this year on the weekend of 1st and 2nd May, with activities in three villages-Springwood, Lawson and Blackheath. The theme for the Festival is From the Mountains to the Sea. There is a particular focus on the effect of stormwater on Blue Mountains creeks and rivers.

The Festival will feature workshops. interactive stalls, displays, entertainment, refreshments, outdoor exhibits, educational games and a schools environment activities exhibition.

Blue Mountains Conservation Society has been holding a series of stalls at various festivals and other local events. During the environment festival, our travelling road show will be putting up the tent at Lawson Mid Mountains Community Centre on Saturday afternoon, the first of May.

Please organise your diaries to be able to give some time, between 1 and 6 pm, and let Tony Towers know if (Phone 4757.1321 or you can help. email atowers@dlwc.nsw.gov.au)

Calico Bag Sales

The calico shopping bags with the Society logo and message are as popular as ever. They are selling well in the upper mountains and people in the lower mountains may like to buy them too. Is there a member who would like to jobshare this task with me and sell calico bags to shops in the lower mountains? Contact Meredith 4782 4823 after 5pm.

Reminder for Bushwalkers

In September 2003 the Society was obliged to pay a new insurance levy of \$12.50 per bushwalker. This covers our leaders and each participant (who is a paid up member of the Society) with public liability and personal accident It was requested that insurance. bushwalking members reimburse this cost to the Society when renewing their membership.

If you have renewed your membership since September 2003 and have forgotten to add on the cost of the insurance levy, we would be grateful if vou could forward \$12.50 for each adult bushwalking member to the Society as soon as possible. The insurance cover is due for renewal again at the end of June 2004. Bob van Reyswoud, Bushwalks Convenor.

Welcome to New Members

Christine Mason, Blackheath Margaret Pavlovic, Hazelbrook Sandra Perrin, Leura Peter Chrismas, Medlow Bath Jeanette Treloar, Wentworth Falls Fiona Forest, Katoomba Grace Armstrong, Faulconbridge Mary Lecke, Glenbrook Maureen Grant, Blackheath Karen McLaughlin, Dargan

Our Bushwalking Group provides a range of activities. Membership of the bush-walking group is available to members of the Society. For further information contact the Activity Leader/Coordinator (listed) or Bushwalks Conveyor Bob van Reyswoud 4757 2694 (phone/fax), email <u>mcreysw@bigpond.net.au</u> Membership details are on page 4. **Cost of insurance and affiliation fees for bushwalkers is** \$12.50 per member.

Pre-School Walks, for parent/grandparent/carer with children under 6 years. Short, easy walks, approx 1 hour, 1st Wednesday of every month, starting at 10.30am. Bring a snack and a drink. Contact Liz Riley 4787.6637 for more *information or if the weather is doubtful.* May 5 Zig Zag Track, Glenbrook. Take the RAAF Base turn off the Highway

- and meet at the end of Knapsack St.
- Jun 2 Lennox Bridge, Glenbrook. Meet at the Bridge parking area on Mitchell's Pass Rd.

Monday Leisure Walks: Usually 'Short Day' walks of 3-5 hours suitable for walkers of average fitness. Graded Medium, i.e. can include some short rock scrambles or some short sections off-track. Bring morning tea and lunch, plus carry at least 1 litre of WATER, 2 litres on warmer days.

- **Apr 12** Ikara Head, Asgard Swamp, Blair Athol. The forgotten mine! Meet 9.15am Mt Victoria Railway Station. BBQ. ☎ Ron 4757 1526.
- Apr 19 Lockleys Pylon. Great views of the Grose Valley. Meet 9am Cnr Mt Hay
- Apr 19 Lockeys Fylon. Great views of the Grose valley. Meet 9am Chi Mt H Road and Great Western Highway, Leura.

 [™] Bill 4759 1692.

 Apr 26 Den Fenella, Underpass/Overpass. Wonderful tree ferns, cool gullies and great views to Mt Solitary! Meet 9am Conservation Hut, Wentworth Falls.

 🖀 Norah 4757 4058.
- May 03 Euroka to Nepean. Wonderful wildlife, great walk! Meet 9am Glenbrook Railway commuter carpark. BBQ. 2767.

Thursday Pleasure Walks: These easy to medium grade walks are conducted to suit the walkers on the day. Times given are approximate. Slower walkers are catered for and on longer walks there is an option of a slower group to complete a section of the walk. Phone the contact for any enquiries about the program, starting times and transport issues. **NOTE: Walks to commence at 10 am unless stated otherwise**.

- Apr 08 Birdwood Gully, Springwood. Gradual descent and ascent on bush track with some steps to Birdwood Gully. Car shuffle if required. Meet at Springwood Station, entrance to commuter carpark. The Marie 4787 1257.
- Apr 15 Gordon Falls to Leura Cascades. Clifftop walk with some rough sections, great views. Lunch if desired at Leura picnic area. Car shuffle. Meet corner of Leura Mall and Megalong Street. To Joan 4782 2218.
 Apr 22 Castle Head, Narrowneck. Walk along ridge to lookout at Castle Head
- via Narrowneck firetrail and bush track. Possible extra section depending on walkers abilities. Meet Gearins Hotel, Katoomba. The Marie 4787 1257
- Apr 29 Radiata Plateau. Easy grade walk on firetrails. Meet Gearins Hotel, Katoomba. ☎ Joan 4782 2218.
- May 06 Dargan Dams, Clarence. Visit to dams on Dargan Creek. Bush track with some steep sections. Meet Mt Victoria Station. The Marie 4787 1257.
- *** Advance Notice for 10 June. A bus trip is planned to visit Taronga Zoo where a number of new exhibits have recently been opened. Costs: \$7 for the bus, plus zoo entry \$20 adults, \$17.50 concession, \$10.75 children. Bookings and bus payment required by 10 may. 🖀 Simone 4757 3416.

Weekend Bushwalks: Always discuss with the contact if the walk you would like to do is medium/hard or hard, before attending. If this is your first walk, or you are in any doubt, discuss with the contact or Bushwalks Convener Bob van Reyswoud

- 4757.2694, email mcreysw@bigpond.net.au Apr 10 (Sat) Ikara Head and Cave Circuit. Meet 9am Mt Victoria Station. Ron 4757.1526. Medium.
- Apr 17 (Sat) Gooch's Crater. Meet 8.30 am Mt Victoria Station. Bill 4758.8545. Medium.
- Apr 24 (Sat) Lockley's Pylon. Meet Cnr Mt Hay Road and GWH. 🖀 Meredith 4782.4823. Medium.
- May 01 (Sat) Royal National Park Bus Trip. BOOKINGS ARE ESSENTIAL. Cost \$10 each. Meet BMCC Katoomba Depot, 7.30 am or at pick-up at Lawson Station 7.45 am. Medium. Enquiries to Michael 9546.4785. Bob van Reyswoud 4757.2694 to book.
- May 08 (Sat) Mt Banks. Meet Mt Victoria Station 9.30 am. Medium. 🖀 June 4787-7312.

Multi-Day Activities, 2004

Apr 27-**3**0 Wombeyan Caves-only upper bunk berths, tent sites or caravan sites still available. Contact Don Morison \$2 30 2116 Aug 1-7 Green Cape, Mallacoota-booked out.

Thursday Morning Interpretive Bushwalks will recommence on 29 April. The first walk will be at Blackheath—meet at the commuter carpark at 9.15am. Contact Christine 4787 7246. Sorry, there are no vacancies for new members at present.