



Eucryphia

ISSN 1037 – 2032

Number 106 – February 2010

Robertson Environment Protection Society – to promote the protection and enhancement of the Robertson Environment
PO Box 3045, Robertson NSW 2577 www.reps.org.au

REPS Meeting Friday 12th February

 **7:00pm sharp**

(Supper at interval)

Robertson Community Centre

'Sustainable Living Without the Hot Air'

Talk and Discussion - Ben van der Wijngaart and Deny Christian

This month we have a different format for our talk. REPS has teamed up with Wingecarribee Shire Council and Four Seasons Sustainable Housing to present the first part of a series of talks on sustainable living to be held throughout the shire. There will be two speakers presenting a discussion on issues including housing, food, transport, energy and consumption. Ben and Deny will focus on what they say are the three big things: energy descent; reduction of consumption; building resilience in communities.

Ben van der Wijngaart is a Greens councillor and the Deputy Mayor of Kiama Municipal Council. He has been involved in supporting numerous community initiatives – the most recent of these being the completion of the Wind Power Concept Study for the Southern Councils Group. This report has been submitted to the Premier's office for funding consideration in conjunction with the Greens Jobs Illawarra initiative, for which he is the renewable energy advisor and a steering committee member. Ben has been an active advocate of renewable energy, and wind power in particular since 2006.

He is a member of the Alternative Technology Association (ATA), the Australian and New Zealand

Solar Energy Society (ANZSES), the Australian Conservation Foundation (ACF), Australian Religious Response to Climate Change (ARRCC) and the Centre for the Advancement of the Steady State Economy (CASSE).

Deny Christian is a Sustainable Housing Architectural Designer with 20 years experience in Sustainable Building. She is also a garden design consultant. Deny will present a slide show of some of the easy and affordable ways to make your home and lifestyle less greedy for water and energy, with design for natural cooling and heating: moderate modifications to passive design, which work with our weather; water collection; grey water; designing an air conditioner garden; growing a vegetable garden.



Ben van der Wijngaart

Upcoming Events

Sun 7th February – *CANWin*, Revisioning and AGM, 2pm at the Council Theatrette, Moss Vale.

Fri.12th February – REPS Public Meeting **7.00pm**, Robertson Community Centre *see above*

Wed 17th February - NPA, Dr Ben Wolfenden, *Stream Flow Regulation and Ecosystems*, CWA Hall, Moss Vale, 7.30pm *see page 6*

Sat 20th February – Sustainable Housing Forum, Moss Vale Services Club *see page 7*

Sat 27th February - Caalang Creek Working Bee – 9:00am Caalang Creek *see page 8*

Sat 27th March – Caalang Creek Working Bee – 9:00am Caalang Creek *see page 8*

Review

Reproduction and Conservation of Jaguars in Brazil

Dr Rebecca Spindler, Manager, Research and Conservation Programmes, Taronga Conservation Society Australia

by Chris Stevenson

At the November 2009 meeting of REPS, the audience was treated to a most interesting and thought-provoking presentation by the guest speaker, Dr Rebecca Spindler, on the future viability of the jaguar populations in North and South America. Commencing with the example of a successful conservation project in North America involving the endangered Black Footed Ferret, Dr Spindler moved on to describe the plight of the South American Jaguars and the conservation effort underway to preserve them. Dr. Spindler was an integral part of a team lead by the local conservation group *Associação Pró-carnívoros* studying the declining fertility of jaguars both in captivity and free-ranging in the Pantanal in south central Brazil, from 2001-2005. Dr Spindler gave a power-point presentation describing the increased knowledge of jaguar biology and techniques used to determine the potential causes for the jaguars' steady decline. Challenges to the project included the topography, climate, local fauna (piranha) and flora (stinging and spiky plants), isolation and basic facilities. However, all these problems were overcome or tolerated with seemingly good humour such that the capturing, sedation and study of the jaguars was undertaken safely and with the ultimate generation of much new data. Expert trackers, dogs, horses etc were sourced from the local population to augment the scientists and technicians from Brazil and the international community.

As well as examining the reproductive fitness of the male and female jaguars, the effect of human encroachment on the traditional habitat was also assessed and factored in to the overall model. From this model, steps were initiated to mitigate the effect of human encroachment such as recommending protected areas, education programs for livestock farmers, and domestic animal management. In concluding her presentation, Dr Spindler summarised the various facets of conservation as the "Conservation Puzzle" in which all the components are represented and work synergistically to achieve a sustainable solution to environmental problems.

We, the membership of REPS, extend to Rebecca Spindler (and husband Duncan) our heartiest thanks for travelling to Robertson and presenting a thoroughly absorbing talk on her work and associated experiences.



Ocean Processes That Reinforce Greenhouse Warming

by David Tranter

Following is a summary of a talk that David Tranter gave at a U3A meeting last year.

Earth is a complex, fine-tuned ecosystem, warmed by the sun, the greenhouse layer and the ocean, none of which is sufficient alone to make it as warm as it is. Its main natural warming agents are orbital factors, reinforced by CO₂ induced greenhouse warming and ocean processes that limit how much CO₂ the air can shed into the ocean and get conveyed to the bottom. The current CO₂ concentration in the air is now higher than at any other time in the last 600,000 years, the history of that rise paralleling the history of fossil fuel combustion. The alternating advance and retreat of polar ice and snow induced by orbitally induced variations in the angle of the summer sun above the polar horizon has generated natural global warming-cooling cycles known as the Ice Ages. These have raised and lowered the level of the sea as much as 120m by thermal expansion and melting of continental ice. Should increasing fossil fuel emissions induce further greenhouse warming, sea levels are likely to rise so high as to inundate such low-lying places as coral atolls, delta nations like Bangladesh and other densely populated foreshores on which many of the largest cities and airports in the world have been built.

Wildflower Walk at Barren Grounds

by Patricia Lee.

On Saturday, the 10th of October 2009, fifteen REPS members and two children gathered at the Barren Grounds Nature Reserve for a wildflower walk in lieu of the usual Friday night meeting. Despite lots of recent rain, the weather was overcast but fine as we walked on the Reserve's sandy track to observe wildflowers amongst the dense heath vegetation. Members were able to observe many species adjacent to the walking track. Society Committee Member Helen Tranter carried a photocopied species list for the area and ticked off flowering plants as we found them. Other members carried guidebooks and attempted to guess species names before validating their choices in the guidebooks. Flowers are not always the best indicator of a genus's species. Leaf shape and general habit and height of the bush needs to be taken into consideration as well. Despite recent rain which can tend to spoil flowers many varieties were identified. The most common colours seen were pinks followed by the yellows. The delicate blue of the *Sowerbaea juncea* (Rush Lily) was also seen. Boronias were just flowering (mid October) though they hadn't yet opened to release their distinctive perfume. A small patch of grass trees (*Xanthorrhoea.sp*) with tall flower spikes was an example of a different type of flowering habit in the Reserve.

The view at the lookout over the Illawarra escarpment and the Pacific Ocean was clear and jewel-like, the verdant patches of green surrounding Albion Park an indicator of the recent good rainfall. Members had morning tea there. The following is a sample of some wildflower species observed by the group in the reserve:

- *Bauera rubioides* - (pink) – River Rose, Dog Rose
- *Billardiera scandens* – Apple-berry Dumplings (yellow/lime)
- *Dampiera stricta* - (blue) – Blue Dampiera
- *Boronia thujona* - (deep pink) – Bronzy Boronia
- *Helichrysum elatum* – White Paper Daisy
- *Goodenia ovata* - (lemon) – Hop Goodenia
- *Melaleuca squarrosa* - Miniature Bottlebrush species (pale lemon) – Scented Paperbark
- *Isopogon anethifolius* - Narrow-leaf Drumsticks or Cone Flower - (yellow)
- *Tetralochea thymifolia* – (pink) - Black-eyed Susan
- *Xanthorrhoea* – Grass Tree - Brown flower spike.

A particularly interesting find was the rare pink *Epacris calvertiana* var. *versicolor*, a bell-flower species. A scaly-breasted thrush was noticed in the bush, its mottled plumage a perfect camouflage.



Daniel Connard, aged 3, enjoying his morning tea in the reserve.
Photo : Patricia Lee

A wildflower walk is an enjoyable way to really notice plants and their habits which you may otherwise miss on the usual fast-paced bushwalk. So pull on your boots, grab a guidebook or a camera and get out to observe what native plants are flowering.

A Good Season In Robertson by Denis Wilson

The local dominant rainforest tree species have had a good year over spring 2009 and summer 2010. Why not take advantage of Nature's abundance, and grow some seedlings?

Firstly, the Sassafras had a heavy flowering and now the trees are carrying a huge array of seed pods (they look like small green olives). In the near future, these seed capsules will dry up, and then open and release their fluffy seeds which will float around on the wind. If they follow previous patterns, you can expect the seeds to lie thick on the ground against fence lines, and under trees – like a mini-snow drift of brown hairy seeds. These seeds are easily collected and can be sown in poly-boxes of fresh soil, or even potting mix. Punch some drainage holes in a box with no drainage,

or layer several sheets of newspaper in a box if it is one which comes with large holes in it. Add about three inches of potting mix then sprinkle the seeds (hairs and all) and gently cover them with a light coating of potting mix, which you should then dampen. If you can keep the box in a cool shady spot, with occasional dampening of the soil-mix, you can expect many seedlings to emerge late next spring.

Coachwoods have also had a bumper season. You may have noticed the brick-red seed coloured trees in the gullies around Robertson, and below the local escarpments.



Ceratopetalum apetalum D.Wilson

Coachwoods have a seed which is classed as a “nut”, surrounded by the enlarged persistent calyx, which is coloured pink to bright red. (Source [PlantNET](#)). When the fruit is mature, it is the calyx which colours up, and it also enlarges, to allow the fruit to spin gently to the ground as they fall. I understand that Coachwoods are relatively easily propagated from these fallen seeds, but I have not done it myself. [The REPS Website](#) says: “The seed ripens about March. The whole fruit is planted fresh, covered very lightly and kept damp. They should germinate within a month.”

Currently, the Eucryphias around Robertson are in full flower. There are several nice plants directly opposite the Post Office, in “Pinkwood Park” – which is named after this plant. There are also some fine specimens at the Bowling Club. Naturally these trees grow around moist gullies, and some may be seen along the steep gullies as one drives down the twisting road just below the top of the Belmore Falls Road. There are many mature Eucryphias growing



Eucryphia moorei Blossom D.Wilson

beside the stream bed in the Barrengarry Creek, just above Belmore Falls (best seen on the far side of the creek).

According to the [REPS website article on Eucryphia](#), “it is important that it should be protected around Robertson where it is near the northern limit of its range and perhaps the only place in the region where it occurs on basalt soil..... The fruit, which are dry and egg-shaped, ripen in April and May and split at the tip to release small, brown, winged seeds. The species can be grown from seed, (which) takes 3-5 weeks to germinate.”

[The Nature of Robertson](#)

Poetry Corner
Edited by Jonathan Persse

Three Australian poets, three ways to observe the world.

Waratah and Wattle

Though poor and in trouble I wander alone,
With a rebel cockade in my hat;
Though friends may desert me, and kindred disown,
My country will never do that!
You may sing of the Shamrock, the Thistle, the Rose,
Or the three in a bunch, if you will;
But I know of a country that gathered all those,
And I love the great land where the Waratah grows,
And the Wattle-bough blooms on the hill.
Australia! Australia! so fair to behold -
While the blue sky is arching above;
The stranger should never have need to be told,
That the Wattle-bloom means that her heart is of gold,
And the Waratah's red with her love.
Australia! Australia! most beautiful name,
Most kindly and bountiful land;
I would die every death that might save her from shame,
If a black cloud should rise on the strand;
But whatever the quarrel, whoever her foes,
Let them come! Let them come when they will!
Though the struggle be grim, 'tis Australia that knows
That her children shall fight while the Waratah grows,
And the Wattle blooms out on the hill.

HENRY LAWSON

Flame-tree in a Quarry

From the broken bone of the hill
stripped and left for dead,
like a wrecked skull,
leaps out this bush of blood.

Out of the torn earth's mouth
comes the old cry of praise.
Still is the song made flesh
though the singer dies -

flesh of the world's delight,
voice of the world's desire,
I drink you with my sight
and I am filled with fire.

Out of the very wound
springs up this scarlet breath -
this fountain of hot joy,
this living ghost of death.

JUDITH WRIGHT

The Death of the Bird

For every bird there is this last migration:
Once more the cooling year kindles her heart;
With a warm passage to the summer station
Love pricks the course in lights across the chart.

Year after year a speck on the map, divided
By a whole hemisphere, summons her to come;
Season after season, sure and safely guided,
Going away she is also coming home.

And being home, memory becomes a passion
With which she feeds her brood and straws her nest,
Aware of ghosts that haunt the heart's possession
And exiled love mourning within the breast.

The sands are green with a mirage of valleys;
The palm-tree casts a shadow not its own;
Down the long architrave of temple or palace
Blows a cool air from moorland scarps of stone.

And day by day the whisper of love grows stronger;
That delicate voice, more urgent with despair,
Custom and fear constraining her no longer,
Drives her at last on the waste leagues of air.

A vanishing speck in those inane dominions,
Single and frail, uncertain of her place,
Alone in the bright host of her companions,
Lost in the blue unfriendliness of space,

She feels it close now, the appointed season:
The invisible thread is broken as she flies;
Suddenly, without warning, without reason,
The guiding spark of instinct winks and dies.

Try as she will, the trackless world delivers
No way, the wilderness of light no sign,
The immense and complex map of hills and rivers
Mocks her small wisdom with its vast design.

And darkness rises from the eastern valleys,
And the winds buffet her with their hungry breath,
And the great earth, with neither grief nor malice,
Receives the tiny burden of her death.

A.D.HOPE

Please send a poem – why not one of your own? – to Jonathan Persse, Sallyhill, Burrawang 2577.

David Karoly's Review of Ian Plimer's Book "Heaven & Earth"

(Connor Court Publishing 2009)

Professor David Karoly is the Australian Research Council Federation Fellow in Earth Sciences at the University of Melbourne; Chair of the Premier of Victoria's Reference Group on Climate Change; Member of the Wentworth Group of Concerned Scientists; and Lead Author of the 3rd and 4th Assessment Reports of the Intergovernmental Panel on Climate Science (IPCC).

Australian Physics, Vol. 44, pp 116-117, July-Aug. 2009
(Abridged by David Tranter)

Ian Plimer's new book, *Heaven and Earth*, claims to shed new light on the science of climate change. It states: that '*human induced global warming has evolved into a religious belief system*'; that '*atmospheric carbon dioxide does not create temperature rise*'; and that: '*global warming and a high CO₂ content bring prosperity and lengthen your life.*' Are these claims justified and based on science? They are in marked contrast to the scientific understanding of the causes of recent climate change reported in the assessments of the Intergovernmental Panel on Climate Change (IPCC), as well as other scientific bodies including the British Royal Society and the Australian Academy of Science. They have all reached the same conclusion: the observed increase in global average surface temperature since the mid-20th century is mainly due to the increase in greenhouse gases in the atmosphere, caused by human activity.

Heaven & Earth claims that this conclusion and almost all the IPCC conclusions are wrong. It suggests that there is a conspiracy among climate scientists to hide the '*truth*' and that learned scientific societies of many countries have been hoodwinked. He implies that this conspiracy involves all the 100-plus national governments that unanimously approved the IPCC assessments. Not surprisingly, the book has attracted the attention of media, politicians, some scientists and the public. Nothing sells like a good conspiracy story. But is this book the story of a conspiracy or even a good read. Is it about science or is it science fiction? It is impressive, possibly interesting, but very disappointing. Impressive because of the time and effort that must have been spent writing the 500 pages with 2000-plus footnotes. Interesting because it seeks to link many aspects of geology, astronomy, biology, glaciology, oceanography and meteorology to explain climate change over the earth's multi-billion history, including the last 100 years. It's disappointing because a senior professor should not have produced such a book with so many errors, so many internal inconsistencies and with no sources for its graphs.

The average reader will find it difficult to sort fact from fiction, distinguish its inconsistencies, and separate his personal opinions and interpretations from well-established science. The book is built around six sections

which deal with sun, earth, ice, water and air in which 18 questions are considered. Many scientists would agree with some aspects of the answers presented. However they contain many errors which make the conclusions invalid. The best description of the problems with this book are provided by Plimer himself: 'Trying to deal with these misrepresentations is somewhat like trying to argue with creationists, who misquote, concoct evidence, quote out of context, ignore contrary evidence and create evidence ex nihilo'

There are some sensible things in *Heaven & Earth*. Yes it is important to '*look at climate over geological, archeological, historical and modern time*'. Throughout Earth's history, there have been natural climate variations driven by many factors including variations in the Earth's orbit, volcanic eruptions, tectonics and changes in greenhouse gas concentrations.

For most of Earth's history, global temperatures and carbon dioxide concentrations in the atmosphere have been higher than present. However Plimer is wrong to claim that '*the IPCC has essentially ignored the role of natural climate variability.*' That is carefully considered in all four of the IPCC's comprehensive assessments since 1990. In its 2007 Report, a whole chapter on paleoclimate focuses on natural climate variations over Earth's history. Yes water vapour is the most important greenhouse gas in the atmosphere. However as Plimer himself states '*water vapour tends to follow temperature change rather than cause it,*' so water vapour changes can't initiate climate change.

Now let me address some of the main scientific flaws in Plimer's arguments. He claims '*It is not possible to ascribe a carbon dioxide increase to human activity*' and '*volcanoes produce more carbon dioxide than all the world's cars and industries combined.*' Both are wrong. Burning fossil fuels produces carbon dioxide enriched with the Carbon 12 isotope, reduced Carbon 13 and essentially no Carbon 14; as Plimer states on pages 414 and 415. And the carbon dioxide emissions from volcanoes on land (which have been estimated for the last 50 years) are small compared with total global emissions from human sources.

Plimer even argues that the most recent sources must be undersea volcanoes. This is not the case, because the net movement of carbon dioxide is from the atmosphere to the ocean. In addition, measurements show that the concentrations of two other long-lived greenhouse gases of human origin (methane and nitrous oxide) have increased markedly over the past 200 years in parallel with carbon dioxide increase, which cannot be attributed to volcanoes. Next, he states that carbon dioxide does not drive climate and then contradicts himself by writing '*CO₂ keeps our planet warm so that it is not covered in ice.*' There is ample geological evidence of increased CO₂ causing climate change, such as the Paleocene-Eocene

thermal temperature maximum about 55 million years ago. He writes *'land and sea temperatures increased by five to ten degrees with associated extinctions of life'* when methane was released into the atmosphere due to geological processes and rapidly converted into CO₂.

Plimer writes repeatedly that global warming ended in 1998; that the warmth of the last few decades is not unusual; and that satellite measurements show there has been no global warming since 1979. He is correct that on time scales of the last 100 million years, the recent global warmth is not unusual. However it is unusual over at least the last 1000 years, including the mediaeval warming. Plimer makes the mistake of using local temperature from proxy evidence rather than data from the whole globe at the same time. The 2006 Report of the US National Academy of Sciences cited by Plimer states *'Presently available proxy evidence indicates that temperatures at many, but not all individual locations were higher during the past 25 years than during any period of comparable length since AD 900.'* We do not expect significant warming to always occur for short periods, such as since 1998. Natural climate variations are more important over short periods: El Nino caused hotter global-average temperatures in 1998 and La Nina caused cooler global temperatures in 2007 and 2008.

Global-average temperature for the current decade, from surface and satellite observations, is warmer than for any other decade with reasonable data coverage. Plimer is wrong to write *'Not one of the IPCC models predicted that there would be cooling after 1998'*. Actually, more than one fifth of climate models show cooling in global average temperature from 1998 to 2008. Plimer writes that solar activity accounts for some 80% of the global temperature trend over the last 150 years. This doesn't fit the observational evidence. Increases in solar irradiance would cause more warming in daytime, in the tropics, in summer and in the upper atmosphere and this has not been observed. Changes in solar irradiance and cosmic rays show a large 11-year sunspot cycle and negligible trend, but observed global temperature show a large warming trend and small 11-year cycle. Plimer is wrong again when he writes, *'An enrichment in atmospheric CO₂ is not even a little bit bad for life on Earth. It is wholly beneficial.'* This is contradicted when he writes that the Paleocene-Eocene thermal maximum was associated with mass extinctions.

Given the errors, the non-science, and the nonsense in this book, it should be classified as science fiction in any library that wastes its funds buying it.

For comment and more detail contact D. Tranter on 4885 1394

Earth Hour 2010

Earth Hour 2010 will be held at 8:30pm Saturday 27 March, with 20 countries and over 250 cities around the world already signed up as part of the global countdown to lights out.

In 2010, Earth Hour will focus on broader, ongoing sustainability, in addition to carbon pollution and climate change.

www.wwf.org.au



NPA Talk

Rehabilitation of degraded rivers

The National Parks Association's next speaker, Dr. Ben Wolfenden, will talk about understanding the effects of stream flow regulation on ecosystem processes, as the key to water resources management in Australia. The talk will be held on Wednesday 17th February, 2010 at 7.30pm. The venue is the CWA Hall, Elizabeth Street, Moss Vale.

After more than 200 years since Europeans first settled Australia, human impacts have irreversibly changed many riverine ecosystems. Key disturbances include the widespread clearing of riparian and floodplain vegetation, the removal of woody debris from river channels, flow regulation, and the introduction of exotic riparian species (in particular *Salix* spp., or 'Willow').

In Australia, like many other countries, the continual decline in river health from anthropogenic disturbance has spawned numerous river rehabilitation projects. However, despite billions of dollars being spent on river rehabilitation worldwide, few projects have met their anticipated success. The recurring failure of river rehabilitation projects highlights a fundamental lack of understanding of how actions affect rivers, and shows our ignorance of the complex interactions governing the aspects of rivers we identify with. Some authors have speculated that the tendency to focus on salient structural elements is a key part of this problem.

In this presentation, I examine the rehabilitation of the Upper Hunter River, a lowland waterway in the Hunter River Catchment, north of Sydney. I aim to demonstrate how understanding basic ecological principles, particularly organic matter cycling, can enhance

rehabilitation efforts. I then discuss the recovery of the Upper Hunter River, and present a conceptual model that predicts recovery trajectories based on different management scenarios.



Ben Wolfenden grew up in a small community on the eastern fringe of the Blue Mountains. His childhood was spent crawling among crags, forests, and rivers very like those surrounding Bundanoon, and forged a life-long interest in sandstone landscapes.

He completed his undergraduate degree in geology in 2001, followed by an honours degree in environmental geochemistry, graduating in 2002. Late in 2003 he began his PhD examining a large rehabilitation initiative. This presentation is based upon that research.

Sustainable Housing Forum

Four seasons Sustainable Housing will be hosting a forum at Moss Vale Services Club, Argyle Street, Moss Vale on Saturday 20th Feb 2010. The forum will have exhibits on the many ways a household can reduce it's carbon footprint. Many of these techniques can be readily implemented in the Wingecarribee Shire. They include: Tanks and grey water systems, Sustainable home design & renovation, Solar hot water systems, Energy saving lighting, Wind power and many more.

The forum will also host hourly lectures by people with qualifications and experience in their field. The subjects covered in the lectures help explain sustainability for the home and garden and also for our wider community.

A copy of the timetable for the day has been included for all those who receive this newsletter by email. If you would like a printed copy please contact Monica at the CTC.

<http://www.sustainablehousingforums.com>

Draft Healthy Catchment Strategy 2009 – 2012

The Sydney Catchment Authority (SCA) has released the draft Healthy Catchment Strategy 2009 – 2012 for public exhibition. The strategy identifies the SCA's rectification

and preventative priorities in the drinking catchment over three years, and the range of activities the SCA will undertake to meet these priorities.

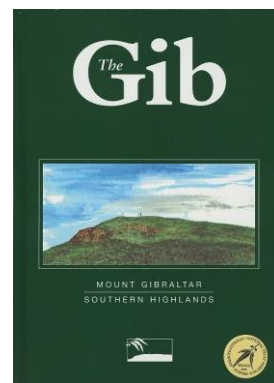
The public exhibition period for the Strategy is scheduled from 18 January to 5 March 2010. The Strategy document is available at www.sca.nsw.gov.au Please contact the SCA's Senior Community Engagement Officer on (02) 4725 2509 if further information is required regarding the public exhibition of the strategy.

Written comments on the draft Healthy Catchment Strategy are requested by 5 March 2010 and can be sent to:

HCS Consultation - Sydney Catchment Authority
PO Box 323
Penrith NSW 2751

Or email: HCSconsultation@sca.nsw.gov.au

The Gib Book



" Great news! The handsome and award winning book **The Gib, Mount Gibraltar, Southern Highlands** has been reprinted.

The price is \$49.95 and the book is available at Council outlets and local book sellers.

It is a well researched social, industrial and natural local history in full colour, 264 page illustrated, hardback, reference book. Produced by local people with expertise and supported by Wingecarribee Shire Council and Hawkesbury-Nepean Catchment Management Authority."

Singing the South

Songwriter/historian Phyl Lobl has written songs portraying Kiama and the Illawarra's colourful past to be performed by a cast of 8 singers and musicians at the Kiama Pavilion, 2pm Sunday Feb 21st. Tickets \$20 from Kiama Visitors Centre Ph: 4232 3322

Joseph Banks and the Flora of the Australian East Coast

Exhibition at the Goulburn Regional Art Gallery on from 27 February – 10 April 2010. See the website www.goulburn.nsw.gov.au for more details. There are some associated exhibitions following this one.

Reminder REPS Membership Renewals Now Overdue

If you have received another REPS Membership renewal form with this Eucryphia, our records show that your REPS Membership fees are now overdue.

● Please return membership fees to:
REPS, PO Box 3045, Robertson NSW 2577

Caalang Creek Working Bees Saturday 27th February and 27th March

9:00 am onwards. Meet at the walking bridge, near the mulch. Bring a wheel barrow, shovel or rake etc. or just bring yourself. You may need gloves, hat, and water. All Welcome. Any queries, Steve Douglas 42714957 or Leon Hall 48882222.

Help Care for Our Nature Reserve 1st Wednesday of each month 10:00am to noon

All welcome. Please bring garden gloves. For further information, phone Helen: 4885-1394

Volunteers wanted at Wingecarribee Swamp

In partnership with Sydney Catchment Authority, Conservation Volunteers Australia will be working to help rehabilitate Wingecarribee Swamp.

The purpose of this project is to trial various rehabilitation works within Wingecarribee Swamp and adjoining land. The small scale trials will help inform the SCA and other stakeholders of the effectiveness of "soft engineering structures" to improve water retention within the swamp and assist in developing long term rehabilitation plans for the swamp.

Sound interesting? You can be involved!

While meeting new friends and enjoying the outdoors you will learn new skills such as: techniques to slow water flow in natural areas, native habitat protection and plant identification skills.

Bookings essential for March – June projects

Phone 02 4228 9246 or email

wollongong@conservationvolunteers.com.au

Visit www.conservationvolunteers.com.au

Land For Wildlife

Biodiversity Assessment and Property Management Planning Course. A Free two day intensive training program for landholders.

Module 1: Survey for and assess the biodiversity values of your property.

When: Saturday 13th February 2010 9.30am – 4.00pm

Module 2: Prepare a property management plan for your property.

When: Saturday 6th March 2010 9.30am -4.00pm

RSVP by - Friday 22nd January 2010 4860 3010 or email belinda.rowe@wsc.nsw.gov.au

To be run and hosted by: Wingecarribee Shire Council and Dept. of Environment, Climate Change and Water.

REPS Meetings for 2010

Please make a note in your diary of the following dates for this year's REPS Public Meetings.

These meetings will include a talk that will be publicised in the Eucryphia prior to each meeting

Friday 12th February – Sustainable Housing

Friday 9th April - Debbie Andrew "Furry Animals"

Friday 11th June

Friday 13th August

Saturday 9th October – Walk

Friday 12th November – AGM

Friday 10th December – Christmas Party

REPS Committee List 2010

President – Leon Hall

Vice President – David Mee

Secretary – Lynn Stevenson

Treasurer – Anne Wilson

Committee Members – Helen Tranter, David Tranter, Jill Keft, David Mee, Peter Glass, Monica Engel, Bruce Clarke, Chris Stevenson

Public Officer and Publicity Officer – Helen Tranter

Talks Convenor – David Tranter

Eucryphia Editors – Monica Engel, Sheila McInnes

Supper Convenor – Jane Maxwell

Caalang Creek Project Group – Steve Douglas

Contact REPS

All those who are interested in supporting our aim are welcome to join REPS. Our aim is to promote the preservation and enhancement of the Robertson environment. We welcome contact with individuals and other community groups.

Please contact The Secretary – Lynn Stevenson

PO Box 3045, Robertson NSW 2577

or President – Leon Hall on 4888 2222

Also, we are always looking for new contributions to Eucryphia. If you have an essay, article, poem or photograph that you want to share with other REPS members please contact Monica Engel.

Telephone: 4885 2665

Or email: monicaengel@robertsonctc.org.au

All contributions will be most welcome.

www.reps.org.au