



Eucryphia

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

OCTOBER REPS Walk

REPS Wildflower Walk at Barren Grounds on Saturday 19th October

Meet at the picnic parking area at 10.00am.



Photo: *Isopogon anemonifolius* Denis Wilson

Instead of a talk we will go out into the environment to look at some of the kinds of vegetation found on the Budderoo Plateau at Barren Grounds and at this time of year there should be plenty of wildflowers to see.

Barren Grounds is a gently undulating area of Hawkesbury Sandstone with a high annual rainfall, where the changes in vegetation according to the type of soil and drainage, often over a very short distance, can be seen quite easily. The most spectacular is the heath community, very rich in species, which occurs on

the shallower soils with low nutrient levels. On the more water-logged areas there are swamps of sedges and rushes lined with tea-tree scrub while the higher, better drained soils support open woodlands.

Meet at the picnic area (1km in from the entrance) for a very easy walk of about 1 km to the Illawarra Lookout and then return for an early lunch. This walk is quite suitable for children. For anyone who wants to stay there could be another short walk along the western track in the afternoon. Helen will have a plant list and plant book for reference. There will be plenty of time on an easy track so bring your own plant book, bird book, camera and binoculars if you like. Bring lunch and remember a hat, walking shoes, water and clothes to manage a change in the weather.

Guide: Helen Tranter (member of REPS and Aust. Plants Soc.)

**All Welcome. Further information, phone
Helen Tranter 4885 1394**

8TH NOVEMBER REPS AGM and “Climate Play”

An interactive event hosted by
David Tranter

Upcoming Events

Sat 19th October – REPS walk “*Wildflower walk at Barren Grounds*” 10.00am, Barren Grounds picnic area

Sat 12th October & Sun 13th October – *Robertson Open Gardens*, 9.30am until 4.30pm, see page 8

Sat 19th October & 30th November NPA Walks – see page 5

Sat 26th October & 30th November – *Caalang Creek Working Bee* from 9.30 onwards, see page 8

Sun 27th October – CTC Cinema “*Discovering the Outback*” 2pm at CTC@Robertson, see page 8

Fri 8th November – REPS AGM and “*Climate Play*” see above

President's Report

Dear Members,

Spring in the Eastern Southern Highlands has been quite warm, and there is still a lot of spring to go. The waratahs are blooming and look stunning. The cherries in Hoddle Street are in flower and soon the street will be covered with pink blossom petals. Fortunately the grass and annual weeds have not burst into their explosive growth just yet. However, blackberries are on the move and cape weed is everywhere. This is a great time for the whole Robertson environment, if we can keep the weeds under control.

I hope you are marking your diaries for Saturday, 19th October. That is the morning that the REPS bush walk in Barren Grounds is scheduled. Please plan to attend, with children and grandchildren in tow. It was such a shame last year when so few turned up and missed a great floral spectacular. Helen Tranter will lead the walk, which will be an easy amble, identifying the wild flowers as we go. This is a great opportunity to learn the flowers of our local sandstone bushland and teach the kids what it is all about. Bring water and food for morning tea and lunch.

The REPS committee could do with some help. The position of secretary has been vacant for some months and this is putting pressure on others who are trying to do their job and a secretarial function as well. The AGM is in November, where I hope to see a full committee, including a secretary, elected. Now the position of secretary is always a difficult one to fill, as it entails some work. In fact the secretary holds the committee together. In order to reduce the onus on one individual, I would suggest that if necessary we could share the job between two, with one taking and writing up the meeting minutes (once every two months), and the other looking after correspondence, both inward and outward. It would be nice to have someone or two in the committee before the AGM, so we can elect them formally in November.

There will be one more issue of *Eucryphia* before the AGM. Please consider whether you can help REPS by being on the committee. Let me know by phone or email reps99@outlook.com if you wish to help. Alternatively, talk to me on the bush walk.

Please put aside December 13th in your diaries for the REPS Christmas social. This is a Friday. Last year's social at the home of Peter and Lyn Glass was very enjoyable. This year, to give them a break, I am proposing that we all come to my home at 23 Lemmons Road. Look out for details in the next issue of *Eucryphia*.

David Mee

August Talk Review

by David Mee

Talk by William Gemmell, 'A brief history of nuclear energy from 1941 to the present – Is there a place for nuclear energy in Australia today?'

William Gemmell has been associated with nuclear energy all his life as a professional physicist, first in Britain and then in Australia. He has also worked in the USA. He is now retired and lives in Robertson. He has kept up with the science and technology of his profession and is well fitted to give our society a perspective on nuclear energy over his lifetime. After the opening announcements, Peter Glass provided an introduction. Bill Gemmell was 'wired up' for sound, and our new sound system was given its first trial. This gave a volume boost that helped to ensure all could hear and understand Bill's Scottish accent.

We had a few visitors who came especially because of the nuclear topic and this made the sound system even more important. Unfortunately it lacked a certain flexibility, which has since been rectified.

The first question raised and then answered was: 'What happens if a room is filled with natural uranium metal?' The answer given was 'nothing much'. There might be some extra measurable radiation, but certainly no reaction will take place. Finding enough uranium to fill a room is a larger problem.

Bill quoted a figure of the energy potential of fission of uranium. One atom of uranium that splits produces 200 million times more energy than burning one carbon atom.

The war-time Manhattan project established much of the basic science and technology. Nobel laureate Enrico Fermi, then working at the University of Chicago, demonstrated how difficult it was to produce a self-sustaining nuclear reaction from natural uranium, but that

by the use of suitable moderators and partial enrichment to the more fissile isotope a reaction could be produced, resulting in the two bombs dropped on Japan to force its surrender at the end of World War II.

Various fissile isotopes ranging from Thorium, Uranium and Plutonium were discussed. After the war many were tried as the fuel for different designs of reactors, and power plants were built based on these. The economics became a central issue. The light water reactor was promoted in the U.S.A. for submarine propulsion and larger scale versions of 600 and 900 MW(e) for electrical power as used in France and the U.S.A. Their fuel was 3-5% enriched uranium. Bill Gemmell worked on the Dounreay fast reactor in which a 60 litre core produced 60MW(e). The fuel was cooled by liquid sodium, giving rise to a significant technological problem of keeping the sodium and water entirely separated.

Big issues facing the industry are the fuel cycle, especially disposing of waste safely; safety of operation; and weapons proliferation and manufacture. All have a political dimension. The failed sites of Three-mile Island, Chernobyl and now Fukushima have all produced serious setbacks.

At this point in the presentation, there was quite robust audience participation, with many opposed to the use of nuclear power. Issues raised included the safe disposal of waste, the unknown long-term biological effects of low level radiation, fear of acquisition of fissile materials by terrorists, and many other problems.

Reactors are now being de-commissioned and both the economics and the technical issues are the subject of debate. He noted the provision of depreciation and de-commissioning was not solely a problem for reactors e.g. has the NSW government established funds for depreciating its coal-fired power stations? If the money is not deposited upfront, or collected by the government as a running cost, then in the limited liability system the owner/operator can simply go out of business, leaving the mess to the government and taxpayer to fund.

A further question raised concerned the amount of low and high level waste produced from the mining process to the spent fuel.

Bill stated that there were over 300 reactors producing base-load power around the world. He believes that this produced fewer deaths per

MWhr than using coal. When Australia decided that it would not use nuclear power stations, that was before the dangers to the environment of burning carbon were fully appreciated. Carbon dioxide and its effect on world climate was not understood as it is today.

Bill quoted a Canadian C.S.R.O. equivalent report on several energy production systems which concluded that hydro power was potentially the most dangerous in that although the probability of failure was minute the consequences were catastrophic. He said we need to consider a variety of energy sources and not eliminate any arbitrarily without consideration.

This report has not captured many technical points raised, and missed much of the detailed discussion, for which I apologise. It is hoped that Bill might come back and address us further on waste, safety and decommissioning.

Vice-President Karen Guymer thanked Bill on behalf of the members and visitors and the meeting was adjourned to partake of supper and ask further questions one-to-one.

Opening of the Robertson Sewerage Scheme

by Karen Guymer

(Committee member Karen Guymer attended the opening of the Sewerage Treatment Plant and has written an account of the event).

The opening of the Robertson Sewerage Treatment Plant last Friday was interesting and we had gorgeous weather. I was able to confirm with project manager Mark Williams that Wariapendi planted Robertson Rainforest species including *Doryphora sassafras*, *Acmena smithii* (Lilly Pilly) and *Acacia melanoxylon* (Blackwood) in 3 rows around the perimeter as a screen to the buildings. Also, once council takes control of the plant, there should be less light pollution as they will operate it with minimal external lighting at night.

Revised Special Areas Strategic Plan

The Sydney Catchment Authority has written to REPS to advise of the revision of the Special Areas Strategic Plan of Management (SASPoM). The revised plan can be viewed at www.sca.nsw.gov.au and submissions or comments will be received by the SCA until close of business Friday 1 November 2013. Submissions should be sent to saspom@ecoaus.com.au



Dean and Ziggy's Rainforest in Burrawang

By Dean Pryke Abertillery

Establishment of Abertillery Rainforest commenced after the property in Dale Street, Burrawang was purchased in 1989. I now live on the property in a dubl-storey cottage and the back half and side boundaries were planted as temperate Coachwood rainforest commencing circa 1991.

Initially, the back half of the property had only the two existing enormous Brown Barrel trees (*Eucalyptus fastigata*) on it with an understorey of mostly weed species such as Berberis, English Holly, Privet and a 30cm thick carpet of *Tradescantia albiflora*.

Amidst the ongoing clearing and burning off of the weed species, I commenced the rainforest plantings with ruffly fifty tubestock of Coachwood which were given to me by Randwick Council Nursery free of charge as they'd had a heavy seed drop of Coachwood that year and had excess stock. This was ideal as I specifically wanted to set up a generally Coachwood dominated rainforest.

Occasional rainforest trees self-settled onto the block also at that time, these included Beefwood (*Rapanea howittiana*) and Tree Violet (*Hymenanthera dentata*), a small prickly shrub that is common on the basalt soils of the Southern Highlands rainforest (historically known as Yarrawa Brush).

The timber paths (above in foto) were cut from recycled waste hardwood timber acquired from council clean-ups, etc., the old timbers

were de-nailed, angle-grinded to remove paint, surface-rot, etc. and given a coat of creosote which then soaked into the timbers before the timbers were simply rubber-hammered into position. In about 2008 a simple cable-stayed suspension bridge was built to carry the path over a pond established to encourage frogs.

Over the years since, the rainforest plantings continued to include *Doryfora sassafras*, *Pittosporum undulatum*, *Hymenoporum flavum*, *Brachychiton acerifolium*, *Hedecarya augustifolius*, *Cassine australe*, *Synoum glandulosum*, *Polyosma cunninghamii*, *Pennantia cunninghamii*, *Livistona australis*, *Archontophoenix cunninghamiana*, *Elaeocarpus reticulatus*, *Eucryfia moorei*, *Acmena smithii*, *Toona ciliata*, *Callicoma serratifolia*, *Alectryon subcinereas*, *Tristaniopsis laurina* and a single *Elaeocarpus kirtonii*, just to name a few of the rainforest species grown with varying degrees of success.

The Brown Barrel tree at the back of the block, as enormous as it is (circa 150 feet hie), has a tendency to drop massive limbs especially during drouts and this has decimated some of my rainforest trees growing directly under it, some of the trees smashed off at the base have coppiced, in particular a Bastard Rosewood tree (*Synoum glandulosum*) which had its entire 2-meter hie trunk smashed off at its base and a Blueberry Ash (*Elaeocarpus reticulatus*) has also similarly coppiced. Damaged Coachwoods there are coppicing as well as producing new shoots along their damaged trunks. When these enormous Brown Barrel branches drop,

we cut up and carry out the huge limbs piece-by-piece and billet them into firewood logs and stack them to season, Brown Barrel logs season quite quickly and we've often burnt them as little as 6 months after cutting them up and splitting them green, and it smells divine when burning!

The center of the property between the rainforest on three sides and the cottage at the front is retained as a lawn for a campfire area with room for tents, any Rainforest Study Group members who are interested in seeing/staying at the property can contact myself or my partner on (02) 4886-4294 (messagebank available).

The central area also includes a stockshed, a chook area, a 2-meter wide geodesic dome used as a rainforest plant growing compound, and a washing-line deigned to look like powerlines so as to blend in and not be too noticeable. The cottage itself has an English Pub lounge room to interact with guests in the evenings.

Burrawang is a village of roughly 300 people that sits on a saddle between McGraths Hill and Silver Springs Hill at 750 meters altitude above sea-level and is set amongst rolling green hills with dairying and beef cattle, potato-growing and has scenery similar to parts of England (in particular Devon) complete with 200-year-old stone walls around some of the farming areas. The geologic history of the area is volcanic (mostly basalt) and the nearby Mt. Saddleback and Mt. Cambewarra are extinct volcanoes of around 22 million years of age.

Burrawang lies about 2 kilometers south of the east-west A48 Highway and has three accesses from the highway, it can be approached from Wollongong's southern suburbs in the east, the M31 (Hume Motorway) in the West and Bowral in the North. Access from Nowra and the NSW South Coast is via B73 (Moss Vale Road) and Kangaroo Valley.

Trusting that this essay/summary is of interest to other Rainforest Study Group members.

(Some readers will notice that some of my spellings are different. That's intentional because I refuse to use "-ough" and "ph" letter combinations because they are a nonsense.)

On the web

Nature Conservation Council NSW

The Nature Conservation Council of NSW is looking for donations to assist it with its various important work and causes. Visit <http://nccnsw.org.au/> or telephone 9516 1488.

The NSW NCC is also advertising the Annual Conference to be held on 19-20 October.

Great Koala Count – 7th-17th November 2013

Spread the word! The success of this project depends on the number of Citizen Scientists eager to participate and make a difference. So, we need as many people as possible, visiting as many areas as possible over the 10 days (7th to 17th of November) of the Great Koala Count.

The Great Koala Count is a Citizen Science initiative. This means YOU have an opportunity to contribute to Koala conservation. Join today to get involved and become a Citizen Scientist!

<http://www.koalacount.org.au/>

NPA Walks

Sat 19 October Morton NP Lake Yarrunga

(Note: Our REPS walk is also this date)

Starting at Meryla Pass we descend down Griffiths Fire Trail to the Lake Yarrunga turn off. This is an unused Fire Trail rough and with many fallen trees. We follow this until it disappears into the lake at an ideal lunch place. Return by the same route.

Steep rough track, fallen trees.

Joan Lowe joan.lowe@bigpond.com 48612996, 0417 492 981.

Contact leader by Thur 17th October

Map Bundanoon 8928-1-S

Sat 30th November Mt Alexandra NR Circuit

The Mt Alexandra circuit takes in 60' Falls, Katoomba Lookout, the Coke Tunnel and the Nattai River. There is a steep climb up to Katoomba Lookout and a very steep decent down through the Coke Tunnel. The walk follows the Nattai River and passes under the Freeway twice.

Steep rough track, creek crossings, slippery rocks and steep steps. 270m asc/dec. 10.5kms Map Mittagong 8929-2S

Joan Lowe joan.lowe@bigpond.com 48612996, 0417 492 981.

NPA members can access the Southern Highlands EPIRB by contacting Joan Lowe 0417492981 or Tony Hill 48844564

If you are leading a walk, it is advisable that you borrow the EPIRB.

Poetry Corner



Thelychiton epiphyticus
photo: Denis Wilson

Jonathan Persse is retiring after many years of editing the Poetry Corner. Many thanks Jonathan from us all for your very valuable contributions over all these years. Peter Glass has agreed to look after us as editor of Poetry Corner in the future but in the meantime here is an introduction to Orchids from Alan Stephenson. You will remember Alan who came to our November meeting last year with Denis Wilson to share his expertise on local orchids. In addition to his book 'Orchid Species of the Shoalhaven', he has published a book of poems. Thank you Alan for allowing us to select some of these to use in this and future editions of *Eucryphia*.

Introduction to "A change of Direction" from Alan

In my younger days in Victoria I was a passionate surfboard rider but became involved with orchids at around the age of 40. About ten years later I discovered terrestrial orchids and subsequently identified *Calanthe triplicata* in the Bendalong area. This area was to be the site of a very large Landfill Facility but following several years of

agitation by the local community it became a National Park.

With the first time discovery for me of many orchid species I upgraded my camera and began taking photos of what I had seen. I then became involved in the latter days of the struggle to protect the nearby Lake Wollumboola catchment area from development. The struggle was successful following a lengthy sitting of the Land and Environment Court.

At the same time I discovered *Prasophyllum affine* at Vincentia. This species is on the Register of Endangered Orchids and was overlooked during surveys. Its find initiated the formation of a Recovery Team by the Threatened Species Unit of the National Parks and Wildlife Service, which at this time is ongoing. Meanwhile the fight to protect Bomaderry Creek continues, as many local people are emphatic in their belief this beautiful area should be preserved in the form of a Regional Park.

After discovering orchids I have found it very easy to become involved with conservation and the protection of natural areas in general. There are many sites in the Shoalhaven area, which require more than lip service by those in power, whether local, State or Federal. Without pressure from "grass roots" organisations, these natural icons will suffer the death of a thousand cuts by gradual but steady development.



Copper Beard Orchid - *Calochilus campestris*
photo: Denis Wilson

The JBRA is the Jervis Bay Regional Alliance, an association of community groups concerned with the environmental, social and cultural well being of the Jervis Bay area.

A CHANGE OF DIRECTION

Alan Stephenson

I sit here idle on a wet afternoon, so many thoughts race through my head
I think of the groups I had joined, sometimes wonder why I did
But my life took on a different hue around my fortieth birthday
I looked at the surf, turned around and walked the other way
Rediscovered the bush and used it now for a totally different purpose
For behold I was told my bush contained of all things, native orchids

I would never have believed lest I saw for myself
Orchids in the ground and atop a rockshelf
The sizes, the shapes, the colours so amazing
I took so many photos, my camera it was blazing
It took a few more years however to realise their plight
A threat of large development began the conservation fight

First Bendalong with triplicata became my immediate focus
Then Lake Wollumboola, a court case and so much hocus pocus
Then it was won but not for all time, some hard work yet to do
Be cautious now, it must be right or we'll end up getting sued

At Vincentia was then found an orchid not seen before on that site
Thus I became involved in another lengthy fight
Another threatened species, you really are a fool
You're lucky you weren't found at the bottom of their pool
A lot of time, surveys and meetings, all for the JBRA
Trying to prevent developers taking it all away

And now to Bomaderry Creek the longest fight of all
The " Friends " will surely place their backs to the wall
To realise a Regional Park, is their ultimate desire
And be assured my friends, for the belly contains much fire
Zieria baeuerlenii is rare, endemic to the area
And dealing with " Terry B ", I could think of nothing scarier
Than if by chance you damaged that little tree
I'm sure he'd do more than put you across his knee
He wrote a thesis on it and should be proud of that
A Masters, no small change and certainly not old hat

The creek is surely a beautiful and restful place to walk
But complete protection requires much more than idle talk
And so you see my friends one can occasionally get lost
An environmental conscience sometimes comes at great cost
Some receive threatening phone calls, others literary abuse
But the opposition shouldn't bother, twill be of little use
These natural classics protected, by groups to which my friends and I belong
And then the other side will be made to sing another song

So as you can see there is great need to be involved
Maintain the focus but the rage must be controlled
For eventually the dark side will be forced to listen to reason
And realise eventually, environmental damage equates to treason
And so my friends you can see, why I became involved in all of this
As my days I the bush are imbued, with that wonderful feeling of bliss



Caalang Creek Working Bees

The next Working Bees will be on the 26th October and the 30th November

The Caalang Creek Working Bees have been going for a number of years, on the last Saturday of each month from 9:30am onwards subject to the weather. The Shire Council contributes greatly by controlling woody weeds and the ever-recurring blackberries. Please come and join us for as long as you are able (planting, mulching, weeding etc).

Meet at the footbridge in Hampden Park. Don't forget water, hat and gloves. We now have tools available, but bring your own if you can.

Queries to Steve Douglas 4271 4957 or Leon Hall 4888 2222.

Help Care for Our Nature Reserve

1st Wednesday of each month

9:00am to noon

Everyone welcome; please bring garden gloves; work sites are chosen according to the weather; stay only as long as you choose.

Details: Helen Tranter 4885 1394 or NPWS business hours 4887 8244.

Robertson Open Gardens

12th - 13th October 9.30am to 4.30pm

Stroll through 8 beautiful gardens ranging from smaller town gardens to larger country gardens. Gardens will be open from 9.30am to 4.30pm.

Tickets will be on sale at CTC@Robertson along with a plant stall being run by the Garden Club.

www.robertsonopengardens.weebly.com

Botanic Art Exhibition at Fettle's Shed

open over the weekend as well as the Heritage Railway Garden which is in full bloom with masses of waratahs.

CTC 2pm Sunday Cinema Series

Discovering the Outback – 27th October

Tony and Anna Williams have made many 4WD trips into the Australian outback. They share their adventures with two documentaries they have made. The first, *Discovering the Outback*, takes them across the Simpson Desert. In *The*

Spirit of the Outback, they explore remote Queensland and stumble upon a unique outback sunrise concert. This desert performance features the African Children's Choir, William Barton, Paul Grabowsky and Kate Miller-Heidke.

Sunday 27th October at 2pm

CTC@Robertson 58 – 60 Hoddle Street

Café opens at 1.30pm tea and coffee available

Adults \$10 children \$5 (CTC fundraiser)

Bookings recommended

4885 2665 or info@robertsonctc.org.au

Wingecarribee Web e-news

Produced by the Environment & Sustainability team at Wingecarribee Shire Council. If you are interested in protecting and enhancing the unique & beautiful environment of the Southern Highlands, or keen to explore ways in which we may all live more sustainably, then this e-newsletter is for you!

[VIEW HERE](#)

[SUBSCRIBE](#)

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. Further information and subscriptions please contact: The Secretary – Karen Guymer

PO Box 3045,

Robertson NSW 2577

or President – David Mee on 4885 1483

reps99@outlook.com

We are always looking for new contributions to *Eucryphia*. If you have an essay, article, poem or photograph that you would like to share with other REPS members please contact the editors, Monica Engel or Sheila McInnes.

email: monicaengel@robertsonctc.org.au

All contributions will be most welcome.

Visit the REPS website

www.reps.org.au