



Eucryphia

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Robertson Environment Protection Society – to promote the protection and enhancement of the Robertson Environment

Next REPS Meeting
Friday 11th August at 7:30pm
at the Robertson Community Centre

A talk by Jack Baker
“Birds and Fire at Barren
Grounds Nature Reserve”

The REPS talk for the month of August will be presented by Jack Baker. Jack has been studying the Ground Parrot and Eastern Bristlebird at Barren Grounds for two decades.

His work has influenced the management of fire in the habitat of these two threatened species.

Jack is Vice President of *Birds Australia*, Manager of Biodiversity Conservation Science in the NSW Department of Environment and Conservation.

He is also a closet twitcher. Come to the meeting to find out exactly what this means!

All are welcome – please bring friends and family. A light supper will be provided. Entry with a gold coin donation.

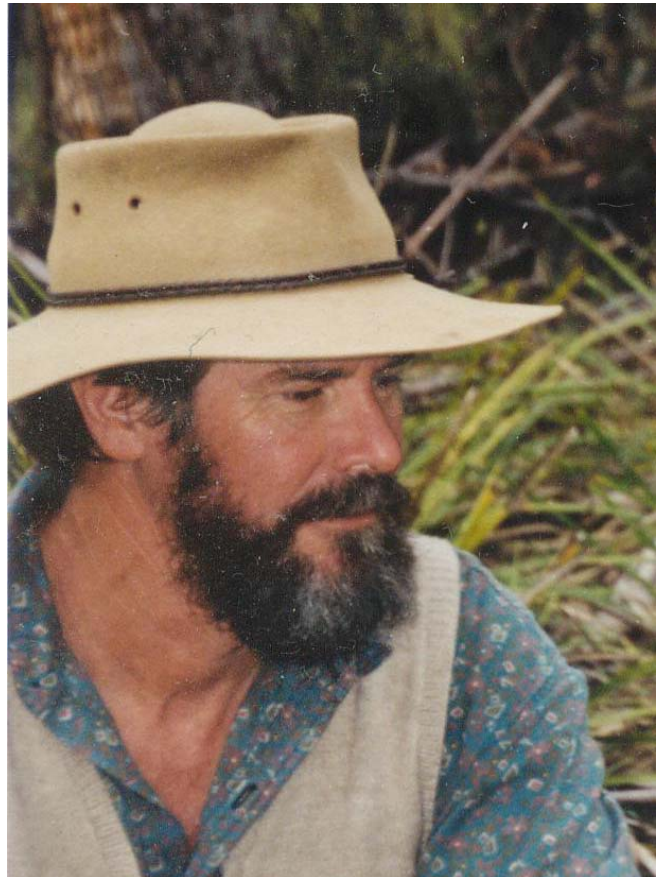


Photo: Jack Baker

Upcoming Events

Fri. 11th August – 7:30pm, Birds and Fire at Barren Grounds Nature Reserve, talk by Jack Baker
Robertson Community Centre, Caalong Street Robertson

Thurs 24th August - Robertson Heritage Railway Station Inc AGM, 7:30pm Fettle's Shed

Sat. 26th August – Calaang Creek Working Bee, 9:30am, Meet at Robertson Community Centre

Wed. 6th Sep. – Nature Reserve Working Bee, 10:00am, Robertson Nature Reserve

Sat. 31st Sep. & Sun. 1st Oct. – Railway Station Fair on October long weekend, Robertson Railway Station

Pat Jordan remembered

by Richard Jordan

Pat Jordan a long- term and valued member of REPS passed away on 22 July 2006, at the age of 62, after a long illness.

Australia has lost one of its most enthusiastic amateur naturalists.

Much of Pat's early life was spent teaching in the developing world. After Richard and Pat married in England in 1965, when Pat was only 21, Richard dragged her off to East Africa to live in a small, remote settlement in western Kenya on the shores of Lake Victoria. With no electricity and at that time there was no doctor for a Province of almost a million people. The high school that Richard and Pat taught at was the only one to offer the hope of higher education to the 3% of children who were able to enter a secondary school.



These were unforgettable times, in a country newly-independent and full of optimism. Although Pat was trained for primary school work, Pat quickly adapted to her new role as a secondary teacher of English. Such was

her ability to inspire her students that the BBC world Service produced a special programme of the poems from one of her second year classes. The health situation in the area was dreadful, with appalling rates of malaria and bilharzia. Pat took charge of the student's health, and could be found to be ministering to the sick at all hours of the day and night. There were no deaths in the 5 years that they were there. Elizabeth their daughter was born during their time in Africa.

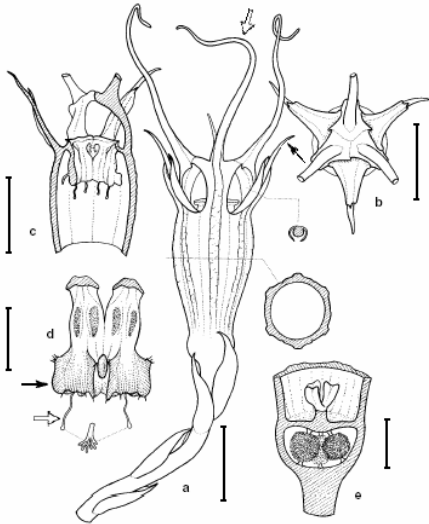
In 1973 Pat and Richard were asked to establish a secondary school on a 15 ha swampland in coastal Papua New Guinea. Pat really showed her wide range of abilities here! She took charge of teaching English, Mathematics, Art and Home Economics in the fledgling school. Her skill was dramatically

demonstrated when our first graduating class, which she had nurtured from the start, achieved the highest grades of any PNG secondary school. Pat and Richard subsequently moved to a senior high school in the Rabaul area. Here Pat used her fine artistic talent in teaching gifted students up to the level of University entrance.

Pat arrived with Richard in Jamberoo of 1982 where they established Barren Grounds Bird Observatory as founding wardens. At the time Birds Australia had the vision for a number of these centres, aiming to provide hands-on education in wildlife biology and conservation issues for all. For Pat this meant a wonderful opportunity to exercise a wide range of her talents. Much of her time was spent cooking for the Adult groups who came to stay for the weekends, and the school groups who came at other times. Her abilities in the kitchen, providing for meals for groups of up to 35, became legendary. Pat was also able to give full reign to her life long love of Botany, and she built a comprehensive reference herbarium on the plant life of Barren Grounds Nature Reserve. Her photographic collection recorded the passing seasons - especially the effect of fire upon the heath land vegetation. More significantly, her background in teaching and her remarkable talent for transferring her enthusiasms to others meant that all those who visited Barren Grounds left with a real understanding of the natural environment and some of the critical issues facing it.

After more than 6 years at Barren Grounds Pat and Richard went their separate ways, and Pat moved to Bundanoon. Pat worked at the Fitzroy Falls Visitor Centre (for NPWS), also doing Discovery Ranger programmes during the School Holidays. People rang the visitor centre for years after Pat stopped this work, asking where the wonderful Discovery Ranger was and if she would be doing any other tour and programmes. Pat was able to inspire everyone she met with an enthusiasm to study and protect the environment. Pat also worked at the Mount Kembla Field Studies Centre (for the NSW Department of Education). Pat became involved with the Robertson Environment Protection Society mounting displays on fungi of the Area with Robertson Primary School Groups learning from Pat of their range and variety. On Biodiversity days and other displays, Pat was always able to come up with a creative edge to interest many.

In June of 2000, Pat's keen botanical eye led her to spy a strange organism in Fairy Bower near Bundanoon. Thinking it was a fungus she investigated further, and so discovered a previously-unknown plant species. This now goes by the scientific name *Thismia clavarioides*, and is one of a small family of tiny plants that mainly flower underground. Pat gave it the common name "Fairy Lantern", and it is still only known from two small patches at Fairy Bower.



Anatomy of a fairy lantern: the main illustration (a) depicts the flower; only the tentacles protrude above the leaf litter. The other (b) is the flower from above (Pic: Telopea)

Pat is survived by her partner John, daughter Elizabeth and four grandchildren. She never sought wealth and possessions. She was distressed by the material excesses of modern Australian society, and more especially by our abuse of the natural environment.

However, her life was full of richness, as will be the legacy of memories she has left for those who knew her.

Richard Jordan, July 2006
emutours@aapt.net.au

REPS Website Progress! by Beth Boughton

Finally the REPS website has made progress with the "Guide to the Yarrawa Brush" now viewable at: www.reps.org.au

This progress is due entirely to the hard work of Ralf Wilson, the son of our long-serving treasurer Anne Wilson.

Although the website is in its infancy, having easy access to the "Guide to the Yarrawa Brush" is a major step forward.

Species plant lists for the Robertson Rainforest plants are presented in a simple format allowing people of all ages to identify local trees and vines.

Recently a new farm worker to the area was able to use the website to identify native species. In the future we hope to list more species found in the Robertson area such as birds and animals.

Maybe Roy Freere would consider submitting a list of Fungi found in the Robertson Nature Reserve with a few photos? Another new REPS member is interested in putting the reptiles of Robertson on the website.

Currently we are looking for someone that may be interested to co-ordinate this project. Those people visiting the website – please excuse us for not having any information except the "Guide to the Yarrawa Brush". But check back again, as we do hope to add more in the near future.

We really do appreciate the work Ralf Wilson has done so far and hope we can continue to develop this website.

Kangaloon Groundwater

by Leon Hall – REPS President

I have recently been appointed to the Kangaloon Groundwater Community Reference Group as a community representative. Since then I have been reading through a few feet of documents and have already attended two reference group meetings (3 by the time you are reading this). These documents, produced for the Sydney Catchment Authority (SCA), are available to all and cover a broad range of topics relating to the Kangaloon Bore fields proposal.

Two reports which may be of particular interest to REPS members are the ecosystem studies;

- Scoping Study for Ecosystem Evaluation and
- Baseline Groundwater Dependent Ecosystem Evaluation Study (interim report).

Upon reading these reports it soon becomes clear that this part of the Metropolitan Catchment Area (mainly along and north of Tourist road) is a rich, diverse and unique environment supporting endangered ecological communities, threatened flora and fauna species, wetlands of national significance and even the potential of new undiscovered species e.g. a frog species could not be positively identified (results of DNA analysis are pending). This is where the SCA (and the NSW government) want to build the Kangaloon bore fields and its associated infrastructure. This proposed infrastructure has the potential to irreversibly degrade large parts of this near pristine environment but more importantly the actual water mining of this fractured rock aquifer could have more devastating effects.

The association between the ground water and the terrestrial ecosystems (e.g. forests and wetlands) is not fully understood here but the lowering of the water table through large scale pumping of the aquifer could break this connection leaving forest trees and wetlands in difficulty.

In March 2006 (a dry period) the groundwater level at Butlers Swamp was approximately 5 metres below the surface. Two monitoring wells here (one well at 24 metre depth and the other 1.8metre depth) both contained stygofauna (Crustacea) and tree roots. The deeper monitoring well here could show forest dependence on the groundwater. This is one way groundwater discharges (through evapo-

transpiration). It also discharges through springs and base flows to creeks, wetlands and lagoons. Discharge will be affected. A Sydney Water employee (now SCA) once told me that they manage their catchment areas better than national parks (NPWS). This will definitely not be true if this proposal goes ahead.

The Groundwater Ecosystem Report has not yet been completed but already there are recommendations that further studies are needed especially at different times of the year. The government intends to fast-track the design and environmental assessment process for this project.

What ever happened to the precautionary principle?

Approximately 50 production bores over 30 kilometres (about 500 metres apart) to supply about 12GL (billion litres) a year is envisaged, pumping for 2 to 3 years followed by 5 to 7 years of recovery. By my maths this is roughly 3.6 GL per year over a 10 year period. The users of Sydney Water supply use about 1.5 GL per day !

This is just part of the issue. There is the potential effect upon local farms and other areas and the related issue of water collection and reuse and water wastage in Sydney.

HAVE YOUR SAY:

The SCA has set up a website where you can make an on-line response to their proposal. It is easy to follow the instructions, write a few words in the boxes provided, and have your say.

It may be found at:

<http://www.sca.nsw.gov.au/dams/GWHYS.html>

Aquifer Reaction

by Denis Wilson

The following paper is an extract of a document, which I have drafted as a response to the Sydney Catchment Authority's Metropolitan Water Plan - Groundwater Investigation Report - June 2006. The main paper, a summary of findings - is entitled investigations for drought water supply.

I am not an economist. In fact, as an old-school public servant, I have frequently found myself vehemently opposed to proponents of the dismal science. And yet, I find myself arguing for the application of market economics to water, in order to try and stop the madness of taking pristine water from the Kangaloon Aquifer, and sending it swishing through the pipes of Sydney at about \$1.20 per kilolitre (1000 litres).

Human-caused climate change:

Firstly, there is an assumption that the conditions we are experiencing now are a result of severe drought conditions. I do not dispute that we are in drought. However, it is apparent that drought conditions are normal in Australia - and ought to be planned for, accordingly.

Furthermore, human-caused climate change, is not a figment of our imagination. It is recognised as a Key Threatening Process to the environment, under the *Threatened Species Conservation Act 1995*. Therefore, this ought to be factored into the management of water for Sydney.

It is apparent from the very title of the study, that the SCA believes there is a solution to drought to be found in grasping at straws such as the Kangaloon Aquifer. That is fatuous.

Wasted water within the Sydney water supply:

The proposed supply of water from the Kangaloon Aquifer is far less than the amount that is lost through leaky supply pipes in Sydney. Does that mean that the proponents of the study think it is all right to risk severe environmental damage to the environment in the Southern Highlands of Sydney, rather than solve the problems of water loss in the system?

Sustainability:

It is claimed that the pumping of water from the Kangaloon Aquifer is sustainable. It might be that there is enough water in the system to supply the bore field for the pumping periods envisaged. But that does not amount to a legitimate definition of sustainability. Surely sustainability would be achieved only when the draining of the aquifer does not exceed its recharge rate?

The papers blatantly acknowledge that: the bore field could extract water in excess of natural recharge rates (Technical Overview Report - P. 53). That cannot meet any definition of sustainability. Such a pumping regime will inevitably produce environmental damage.

The Peer Review study by D.R. Woolley (Appendix A to the Technical Overview Report) notes, among other things: "None of the reports seen to date has provided an estimate of the *likely safe yield* of the Kangaloon Aquifer system. (T.O.R. - P. 69)" (emphasis added)

Water consumption levels:

The fundamental point is that Sydney needs to adapt its consumption to a sustainable level.

The use of drinking quality water, for all uses - including toilet flushing, washing the car, and watering public parks - is wasteful of a precious resource.

In fact Kangaloon Aquifer water could be considered for sale directly, as bottled water, at a notional \$2:00 per litre (retail). Instead it will be sent down the pipes of Sydney, to be priced at \$1.264 for 1096 litres. (Sydney Water: Tier 1 consumers rate, using a metered 1.096 kL/d per day - averaged over the billing period). That is a very uneconomic use of a precious resource.

Use of recycled water needs to be greatly increased, as a top priority. The uptake of incentives for domestic water tanks in Sydney has been very poor. There ought to be an education campaign to change the attitude of the public towards water. The Water for Life campaign is mis-directed. Indeed, it is counter-productive, for it attempts to persuade people that Sydney has been drought-proofed, when in fact that is far from the truth. The public ought to be brought into the equation, to participate in

reducing demand, especially by reducing wastage.

A public relations campaign run in Canberra at the worst point of the drought, there, was very successful in changing people's attitudes to green lawns, for example. It reached the stage where a yellow, parched lawn was a sign of ones good citizenship status regarding the water campaign.

The Water for Life is saying that things will be all right, if we just do this and that, to modify our usage, a little (and there is the Aquifer water as a back-up supply) - so don't panic. Population growth in the Greater Sydney conurbation needs to be discouraged. Instead of assuming that growth is natural, or worse - essential for the economy, it ought to be limited.

There are standard economic responses to achieve these ends. Reducing supply of land, and resultant price increases in the market ought to be seriously investigated. Responsible pricing of water ought to be investigated, to make people value water as an important resource.

Let the price reflect the scarcity of the product - this is classic market economics.

HAVE YOUR SAY:

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It may be found at:

<http://www.sca.nsw.gov.au/dams/GWHYS.html>

Kangaloon Bore Fields proposal

Two reports have recently become available on the Sydney Catchment Authority (SCA) website:

www.sca.nsw.gov.au

These are located under the "Publications" link.

Groundwater Investigation Report - June 2006

Groundwater Investigations for drought water supply (GW026-06-06VI)

Technical Overview Report

Groundwater Investigations - Severe Drought Water Supply Sources for Sydney June 2006. (GW027-06-06VI)

These reports and other underlying documents are available in hard copy or CD upon request. (phone:1300 722468)

Become informed read these reports

The mining of this water has the potential to upset fragile ecosystems, including yours. This issue also relates to the 'leaking bucket of Sydney'. Take this opportunity to make a submission in writing or via email to groundwaterinfo@sca.nsw.gov.au

The submissions / comments must be received by the 18th August 2006

Web sites of interest:

www.kangaloonaquifer.blogspot.com and
www.peonyden.blogspot.com

For other information or feedback about this issue or the Shoalhaven water transfers issue please contact Leon Hall (Robertson Environment Protection Society-REPS and Member of Reference groups) on telephone number 4888 2222.

Yard Work - As Viewed From Heaven

A conversation between God and St Francis



God: Francis, you know all about gardens and nature; what in the World is going on down there in the U.S.? What happened to the Dandelions, violets, thistles and the stuff I started eons ago? I had a perfect no-maintenance garden plan. Those plants grow in any type of soil, withstand drought, and multiply with abandon. The nectar from the long-lasting blossoms attracts butterflies, honeybees, and flocks of songbirds. I expected to see a vast garden of colour by now. All I see are patches of green.

St. Francis: It's the tribes that settled there, Lord. They are called the Suburbanites. They started calling your flowers "weeds" and went to great lengths to kill them and replace them with grass.

God: Grass? But it is so boring, it's not colourful. It doesn't attract butterflies, bees or birds, only grubs and sod worms. It's temperamental with temperatures. Do these Suburbanites really want grass growing there?

St. Francis: Apparently not, Lord. As soon as it has grown a little, they cut it....sometimes two times a week.

God: They cut it? Do they bale it like hay?

St. Francis: Not exactly, Lord. Most of them rake it up and put it in bags.

God: They bag it? Why? Is it a cash crop? Do they sell it?

St. Francis: No sir, just the opposite. They pay to throw it away.

God: Now let me get this straight...they fertilize it to

make it grow and when it does grow, they cut it off and pay to throw it away?

St. Francis: Yes, sir.

God: These Suburbanites must be relieved in the summer when we cut back on the rain and turn up the heat. That surely slows the growth and saves them a lot of work.

St. Francis: You aren't going to believe this Lord, but when the grass stops growing so fast, they drag out hoses and pay more money to water it so they can continue to mow it and pay to get rid of it.

God: What nonsense! At least they kept some of the trees. That was a sheer stroke of genius, if I do say so myself. The trees grow leaves in the spring to provide beauty and shade in the summer. In the autumn they fall to the ground and form a natural blanket to keep the moisture in the soil and protect the trees and bushes. Plus, as they rot, the leaves become compost to enhance the soil. It's a natural circle of life.

St. Francis: You'd better sit down, Lord. As soon as the leaves fall, the Suburbanites rake them into great piles and pay to have them hauled away.

God: No way! What do they do to protect the shrubs and tree roots in the winter to keep the soil moist and loose?

St. Francis: After throwing the leaves away, they go out and buy something called mulch. They haul it home and spread it around in place of the leaves.

God: And where do they get this mulch?

St. Francis: They cut down the trees and grind them up to make mulch.

God: Enough! I don't want to think about this anymore. Saint Catherine, you're in charge of the arts. What movie have you scheduled for us tonight?

St. Catherine: "Dumb and Dumber," Lord. It's a really stupid movie about...

God: Never mind - I think I just heard the whole story from Saint Francis!



Help Care for Our Nature Reserve
1st Wednesday of every month
10:00am to noon
6th September, 4th October, 1st November

Our precious Robertson Nature Reserve needs more Robertson people to help it by gradually removing the privet, holly and other weeds. It isn't hard work. Bring garden gloves. Join us for just 2 hours and discover more about the rainforest plants at the same time. For further information, phone Helen: 4885-1394

Railway Station Fair
October long weekend
Saturday 30th Sept, Sunday 1st Oct 2006
Activities include:

- ❖ Aboriginal Art Exhibition in the Fettle's Shed Gallery.
- ❖ Model fully operational steam railway, + visit from 3801 on Sunday.
- ❖ Stalls on the Village Common.
- ❖ Food to eat from snacks and drinks to full luncheon with real coffee.
- ❖ History museum in the station building.
- ❖ Waratah display in the station gardens, Station outdoor sculpture park (Reconciliation sculpture, Flugelman sculpture, plus historic railway artefacts).
- ❖ Live music, Aboriginal Music/dance performances.
- ❖ Local native plants information and sales.
- ❖ Railway 2nd hand book stall in the parcel room.

Interested in having a stall or running another activity at the fair? Contact Stephanie Cassar with enquiries (4885 1204 or scassar@hinet.net.au). Other enquiries contact Anne Wilson on 4885 1598 or annejw@bigpond.net.au - we will need many volunteers to help with organisation.

"Artist, Artisans and Aspects of the Southern Highlands"
July 17th until August 25th
Robertson CTC

An exhibition of black and white photographic prints by Ken Redpath at the Robertson CTC from July 17 until August 25, 2006.

Ken has endeavoured to portray some of the artists and artisans who live and work in the Southern Highlands, particularly around the village of Robertson, where he and his family live. The Aspects are pieces of Southern Highlands environment which inspired Ken and which he considers may have some bearing on the other artists' choice to live and work here.

Next REPS Working Bee
Saturday 26th August from 9:30am-noon

Note that with Spring coming there is still much to be done at Caalang Creek such as weeding and spreading of mulch.

We need your help to assist us to maintain this long established REPS' project.

Note that we hold a working bee on the last Saturday of each month. Please contact Sandy Morse (48851905) or Leon Hall (48882222) for more details.

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 – Jill Keft
PO Box 45, Robertson NSW 2577
or President – Leon Hall on 4888 2222
or Editor – Lyndon Stanley on 4885 1322
Email: lyndon@hinet.net.au
