



Eucryphia

ISSN 1037 – 2032

Number 119 – June 2012

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

Next REPS Meeting Friday 8th June 2012 at 7:30pm “Speaker Night” at the Robertson Community Centre

CLEAN ENERGY OPTIONS FOR ROBERTSON

An informal conversation on the
available options, involving REPS
Members and other Invited Guests
Discussion Leader: David Tranter



Savonius, Bi-Conical or Helical, Vertical Axis Wind Turbine

Energy costs are rising fast due mainly to expenditure on the grid to meet peak demands by energy-hungry appliances like air conditioners.

How can we reduce our energy costs?

- Energy efficient life styles? – Are dishwashers really necessary?
- Smart metering? – Can we do it ourselves?
- Rooftop Solar Water Heating? – Are Electric ones energy guzzlers?
- Photo-voltaic energy generation? – PVs are becoming much cheaper.
- Smart (LED) lighting? – Is point lighting better than space lighting?
- Energy-efficient retrofitting? - Insulation and curtains (with warmth saving pelmets)
- Passive solar house design? – “A House for all Seasons”, published by REPS.
- Small, home-made vertical axis wind turbines? – Using old washing machine parts?
- Micro-hydro energy generation? - ? Sheepwash Road Pumping Station, Robertson Sewage Treatment Plant?
- Public transport?? – How can Robertson people get around the Shire without cars?
- Electric cars? –Who will make the first move to install battery charging stations?
- Energy efficient farming Incentives? – Planting more trees? Reducing soil emissions?
- Site Demonstrations?
- And so on.

**Come along and bring your Questions
and Knowledge**

**All welcome Active discussion Light supper
Gold coin donation**

Upcoming Events

- Fri 8th June – REPS Discussion, *Clean Energy Options*, see above
Sat 16th June – NPA Bushwalk, Pipeline and McPhails Fire Trails, page 8
Sat 30th June, 28th July – Caalang Creek Working Bees – 9:30am onwards, page 8
Sun 15th July – CTC 2pm Sunday Cinema Series, *Les Diaboliques*. 58-60 Hoddle St, Robertson.

Island. There are no permanent residents on the islands, but they are a national park and rangers live there on a rotation basis.

Kevin showed a slide of a Russian ship which takes visitors and eco-tourists to the islands, having around 35 passengers and 22 crew. It leaves from Tauranga Harbour in the Bay of Plenty. Kevin travelled on this ship in 2011 to Raoul Island. First discovered by the Polynesians in the 13th century it was re-discovered in the late eighteenth century by Huon de Kermadec, the captain of the French vessel *Esperance*, on a search for the missing LaPerouse. Since European discovery it became a haven for feral animals such as goats, rats and cats, now all eradicated thanks to the skills and dedication of the NZ national parks officers. At the end of the 19th century a family called Bell settled on the island and tried to establish a farm there, remaining on the island for around 35 years. The remnants of their old homestead are still there, but weed infestation followed after they left. There is a landing place, but it is not easy, and bad weather or winds can prevent safe landing for days. The island still exhibits volcanism, and has two lakes, known as Blue Lake and Green Lake, coloured by bacteria which exist at different temperatures (similar to Yellowstone in the US?). The island is covered in sub-tropical vegetation, including lots of palms and ferns. The endemic tree, *Metrosideros kermadecensis*, grows there to gigantic proportions.

The comparison of vegetation to other islands in the southwest Pacific, including Norfolk Island and Lord Howe Island was one of Kevin's main interests for study. There are many shared plants between the islands. Kevin showed that there are over 180 indigenous species to Norfolk and about 116 the Kermadecs. Kevin pointed out that the number of endemic species was highly correlated with the age of the islands, with Raoul Island being more recent. More ferns are shared than other plants, probably because fern spores can travel in the winds. With the removal of the rats from the island, many of the native plants are now thriving. Kevin showed the native hebe, *Hebe breviracemosa*, now flourishing, but feral plants are also recovering, such as passionfruit. Endemic tree ferns include two species of *Cyathea*. Palms are also in abundance, including a species shared with Norfolk Island.

Although there are now no mammals on the island, there is a significant birdlife, and Kevin mentioned some including the green parakeet and the black-winged petrel.

There were many questions from members, and the talk concluded with Jane Lemann proposing a vote of thanks, and presenting wine and flowers to Kevin and Jacqui. The meeting was then adjourned for tea and cake, as well as conversation and discussion.

THE NATURE OF SCIENCE

Preamble by Bob McInnes

A.C.Grayling is a prominent English academic philosopher and atheistic author who critiques religion in perhaps less combative confrontational terms than fellow authors scientist Richard Dawkins and the late author/correspondent Christopher Hitchens. For some years he was a regular columnist in New Scientist Magazine and has published many books, including *Ideas That Matter – a personal guide to the 21st century*. It covers 164 topics categorised under Politics and Society, Philosophy, Religion and Science. The topics are set out in alphabetical order for easy reference and are crossreferenced. It goes a long way to refute the claims that only religion can hold the keys and authority to human morality. It was published in 2009.

In 2011 Grayling tackled the claims that Atheism is itself a “Religion” in his latest publication *The Good Book*. In these times of Fundamentalist Christians and Muslims hanging on every word of the Bible and Koran respectively, as giving them power and control over people’s thoughts, many non-believers, Atheists perhaps, lament the absence of some form of liturgy and poetry of their own. *The Good Book* mirrors the Bible in both form and language and is, as its author says, “..ambitious and hubristic – a distillation of the best that has been thought and said by people who’ve really experienced life and thought about it.” As Decca Aitkenhead said in a review, “Drawing from classical secular texts from east and west, Grayling has done just what the Bible makers did with the sacred texts, reworking them into a great treasury of insight, consolation, inspiration, uplift and understanding in the great non-religious traditions of the world.”

Scientist Dr David Tranter has been reading *The Good Book* and here presents some interpretations and insights regarding the chapters and verses of the first ‘book’ “Genesis”.

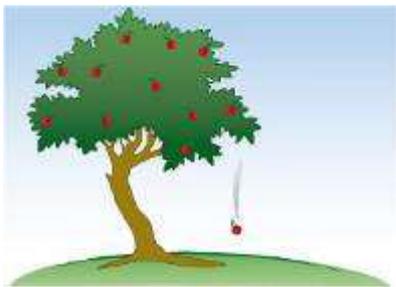
Paraphrased extracts from A. C. Grayling, The Good Book, Bloomsbury 2011

by David Tranter

Background: Fifty years ago, C.P. Snow suggested that the arts and sciences were separate cultures, which failed to understand each other, a rift that has largely disappeared due to science-based prosperity. In recent years, that rift has been replaced by a denial culture in the guise of "scepticism" that questions the validity of science and its quality-control peer-review system. Since scepticism is the life-blood of science, the use of that term by deniers could well have other motivations.

Science is based on observation and experiment, generating theories that can be independently evaluated on their merits by fellow specialists and rejected if they are found wanting in favour of sounder ones. In this way, science progresses from uncertainty towards certainty. What people refer to as "belief" cuts no ice in science. Facts are facts. The current rift could be due in part to the failure of scientists to communicate with the public, allowing deniers to appropriate the discourse; and in part to a tendency by some to develop their own world view and defend it at all costs in the face of contrary evidence.

So my aim is to explain as best I can what I call "The Nature of Science" in the hope that it might help to heal the rift. This requires me to speak in plain English and metaphor rather than the lingua franca of science, so I will draw heavily on the writings of A.C.Grayling, who has a way with words that I would fail to match.



"In the garden stands a tree. In springtime it bears flowers; in the autumn fruit. Its fruit is knowledge, teaching the good gardener how to understand the world. From it he learns how the tree grows from seed to seedling and maturity; at last ready to offer more life; - and from maturity to age and sleep, whence it returns to the elements of things. The elements in turn feed new births; such is Nature's method and its parallel with the course of humankind.

It was the fall of fruit from such a tree that inspired new inquiry into the nature of things. When Isaac Newton sat in his garden, he saw what no one yet had seen before - that an apple draws the Earth to itself and Earth the apple through a mutual force of nature that holds all things, from the planets to the stars, in unifying embrace. So, all things are gathered together into one thing: the Universe of Nature; in which there are many worlds: those orbs of light in the night sky in the immensity of space and time; and their satellites, on one of which is a part of Nature that mirrors Nature in itself, contemplates its beauty and significance and seeks to understand it. This is Humankind.

All other things, in their cycles and rhythms, exist in and of themselves; but in humankind there is also experience and curiosity. New eyes are needed to see what lies hidden behind the veil of ignorance; new language to describe the unknown, new hope that Earth will reveal itself to inquiry and investigation. Those who first set themselves to discover Nature's secrets and designs, confronting mankind's earlier ignorance, deserve our praise; for they began the quest to measure what once was unmeasurable, to discern its laws and conquer time itself by understanding.

The first enquirers saw that nothing comes from nothing and sought to identify its primordial elements - how Nature yields its abundance and fosters it; and where, in its course, everything goes when it ends, either to change or cease. The gardens of the open ocean cultivate themselves. Each spring, its sunlit surface waters bloom with microscopic algae, nourished from below the previous winter by wind-driven mixing of the water column. This annual algal bloom attracts myriads of filter feeders, small and large until all the available nutrients are depleted. Then the bloom comes to an end and its remains sink back into the depths, where it is transformed into the same elements that gave it birth.

Fear holds dominion over people, when they understand little, needing simple legends and stories to comfort and explain. But legends and the ignorance that gives them birth are a house of limitations and darkness. Knowledge is freedom - freedom from ignorance and its offspring fear. Knowledge is light and liberation - knowledge that Earth contains itself and its origins and the mind of man from which comes more knowledge and enlightenment.

All things have their origins in Nature's laws and by their edicts reach the shores of light. When things fall and decay they revert to their source components nourishing new life. Life is the consequence of death; death is the consequence of life. Nothing perishes to annihilation. If time that wastes with age the works of the world were to destroy them entirely, how would generations replenish themselves kind by kind? How might the water springs of the mountains and the far-flung inland rivers keep the oceans full?

By these gifts of Nature, Earth's inhabitants are nourished and sustained. Joyful cities echo with the laughter of children and bushland with the songs of birds. Nature offers its bounties, the kind lands and seas give up their stores, then what has been given returns to its source to prepare bounties anew".

Rare Daisy found in Kangaroo Valley on the Three Views Trail

by Denis Wilson

Several weeks ago I was looking for Orchids in the Lower Kangaroo Valley area (Three Views Trail) above the Tallowa Dam. This is within the Morton National Park. I noticed a small, twiggy sub-shrub (about 30 cm high), with small blue daisy-like flowers. My first impression was it was a "daisy", but it didn't look familiar.



The *Olearia ramosissima* "capitulum"

In Botanical terminology the entire floral structure of Asteraceae plants is called a capitulum.

This plant does have the usual "Daisy" arrangement of "ray florets", the flattened parts of the classic daisy flower which we normally assume are

"petals". They are actually separate small flowers, but they give it the classic daisy outline. But this plant appeared to lack the normal cluster of minute fertile "disc florets" with which we are all familiar, in classic "daisy flowers" such as the golden centre of "Everlasting Daisies". Instead, this plant has about 8 moderately large "florets" in the centre.

And now to the most troubling feature, for me - the strange leaves. The stems were very rough, almost warty. Hardly any proper leaves at all. It was what I have described as a twiggy sub-shrub with warty protrusions.

The flower structure and the unusual leaves puzzled me, and I could not match it in the standard botanical texts for plants of the Sydney Region.

I received assistance with identification on this plant from a blogging colleague in Canberra, who referred my query to the Asteraceae specialist in the Australian National Herbarium, Brendan Lepschi. He quickly identified the plant as *Olearia ramosissima*. Armed with that information, I was able to go back and confirm that the details of my photos indeed match the description as shown in *PlantNET*, and distribution as shown in the *Atlas of Living Australia*.

Incidentally, the West Australian *FloraBase* shows a "common name" of "Much-branched Daisy Bush". That fits with my impression of a "twiggy sub-shrub with daisy-like flowers".



Leaves of *Olearia ramosissima*

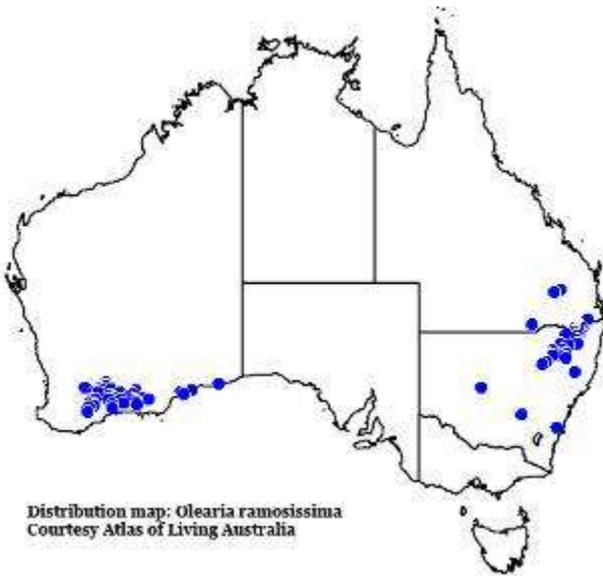
The leaves appear to be growing in tiny "rosettes" from nodes along the stem - some pointing upwards (along the stem) others pointing sideways, and some facing backwards. And the leaves have definite "warty protrusions". That is definite "Layman's Speak" for what I see in front of me.



Botanical illustration courtesy of PlantNET.

The "warty surface" I had noted is clearly shown in this excellent botanical illustration showing the "tuberculate" protrusions on the tiny leaves.

Brendan Lepschi had mentioned the "weird" distribution of this plant. (See Map below)



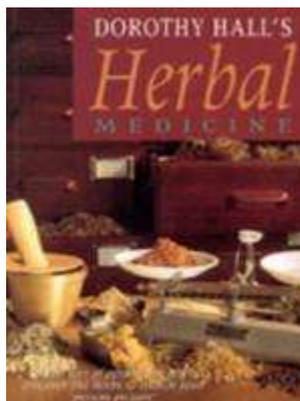
This species has a "disjunct distribution" - split between Western Australia (Esperance region) and northern NSW, but with a couple of outlying records, including one, crucially from Shoalhaven Gorge. That links the known range of this plant directly with where I found it, about 30 kms further down river from the Shoalhaven Gorge.

The distribution map for this species reminds me of several other Australian organisms which have disjunct distributions. When I was growing up in Melbourne (a long-time ago) I was introduced to the wonderful world of Australian birds courtesy of Neville W Cayley's *What Bird is That?* In birding

circles, the classic cases of disjunct populations like this are the Eastern and Western Spinebill, and the Eastern and Western Bristlebird. But there are other examples, such as the various species of white-tailed Black-Cockatoos in Western Australia. It is accepted that these birds have speciated away from their cousins in the east of Australia (or possibly it is the other way around) because the eastern and western populations of those birds are considered to have been separated by habitat changes. This was always explained to me in terms of the pre-historical drying of the Australian continent, resulting in similar members of a family of animals becoming separated because of the intrusion of the arid zone of Central Australia into the middle of their presumed original continuous range across southern Australian.

So, I cannot help speculating that the distribution of this plant is an example of long-standing Climate Change. Before my comments are misinterpreted as an argument against the current "climate change" argument, I mean no such thing. Clearly speciation of plants and animals with disjunct ranges such as this has occurred over a lengthy period of time. But that is no reason why mankind ought to alter the global climate by deliberate pollution of the atmosphere with carbon dioxide and other chemicals.

Photos by Denis Wilson unless otherwise indicated.



Vale Dorothy Hand

Sadly, valued REPS member Dorothy Hand has passed away. She was well known as author Dorothy Hall, herbalist, for her writings on herbal medicine. We would like to acknowledge Dorothy's kind assistance with compiling *Eucryphia*. She was one of the regular "super-editors" with an eagle eye, and also folded and posted many editions. Dorothy was also the mother of REPS past-president Leon Hall to whom we extend our condolences.

Poetry Corner

NESTS

Chosen by Georgina Persse

The Eastern Shrike-Tit, Stanza 3, C. J. Dennis

I take life with zest, and, when building my nest,
Then the scientist awakens in me,
I work with a will, with my stout little bill,
And peel the green bark from a tree.
Then I wait, when that's done, till the heat of the sun
Curls a neat little hook at the end;
So, when woven and bound, there's a home, strong
and sound,
On which any wise bird may depend.

The Blue Wrens and the Butcher-bird

Stanzas 2 & 4

Judith Wright

Cobwebs they gather and dry grass,
greeting each other as they pass
up to the nest and down again,
the blue wren and the brown wren.
They seek and carry far and near,
down the bank and up the hill,
until that crystal note they hear
that strikes them dumb and holds them
still.

Still and still the blue wren
sits beside his cowering hen.
There they wait like stone by stone
until the butcher-bird is gone.
Then soft and sweet the blue wren
twitters to his anxious hen,
"Trust to me, oh trust to me;
I know another blackthorn-tree."

from New Cautionary Tales, Hilaire Belloc

Birds in their little nests agree
With Chinamen, but not with me.

from Book of Nonsense, Edward Lear

There was an Old Man with a beard,
Who said, 'It is just as I feared! –
Two Owls and a Hen,
Four Larks and a Wren,
Have all built their nests in my beard!



Nest, Sarah Day

In this silvereve nest
scarcely bigger than a hen's egg,
the landscape is synthesised.
Moss lines its bowl,
green as the slopes
on which Friesians loll
like jigsaw pieces;
there is pale human hair
and some strands
of dark horsetail,
sheep's wool
plucked from barbed wire
woven among rye
and barley grass, strands
of carded turquoise,
and blue marine,
stolen from a washing line —
a colonial history
cupped in the substance
of this little vessel.
And in its structure,
its deft warp and weft
and basketry of wallaby grass —
the domestic architecture
shouldered by the women
to whom this pasture
once was home.

from My Little Grey Home, D. Eardley Wilmot

It's a corner of heaven itself,
Though it's only a tumble-down nest,
But with love brooding there, why, no place can
compare,
With my little grey home in the west.

from To a Skylark, William Wordsworth

Ethereal minstrel! Pilgrim of the sky!
Dost thou despise the earth where cares abound?
Or, while the wings aspire, are heart and eye
Both with thy nest upon the dewy ground?
Thy nest which thou canst drop into at will,
Those quivering wings composed, that music still.

Please send a poem on the environment, written by yourself or another person, to Jonathan Persse, Sallyhill, Burrawang 2577



**Next REPS Working Bees
Saturday 30th June & 28th July**

Meet at the footbridge in Hampden Park from 9:30am onwards. Don't forget water, hat and gloves. We now have tools available, but if you can, bring your own.

Queries to Steve Douglas 42714957 or Leon Hall 48882222.

Help Care for Our Nature Reserve

Next Working Day: June 13, 9.30 am onwards.

Come and help if you can, bring garden gloves, phone 4885-1394 for details and July date.

Good News!

Ford Kristo has been able to get some NPWS funds to employ a professional bush regeneration team for one week to remove most of the forest of young privets which have come up under the pine trees. Helen and Jane are very happy.

Robertson and surrounds e-news

Would you like to subscribe to the free monthly Robertson e-news? Follow the steps below and a newsletter will be sent to your email address at the beginning of each month,

1) Click on the link below to the Robertson e-news page on the tiny letter website.

<http://tinyletter.com/robertsonctc>

2) Enter your email address and click on the subscribe button.

3) Tiny letter will send you an email to confirm your registration. You need to confirm your subscription by clicking on the link in the email.

The newsletter content is put together at CTC@Robertson and includes relevant information for Robertson residents.

Local Websites of Interest

Something for everyone – 13-14 October with gardens, trains, exhibitions, tractors and more

www.robertsonopengardens.weebly.com

Check out the new www.robertson.nsw.au

While you're there have a look at the entries for your community group or business and let the webmaster know if there are any changes to be made. You can do that via the contact form on the front page.

NPA Walk

16 June Morton NP

Pipeline Lookout and McPhails Fire Trail

Distance: 12kms, steep desc. Grade 2. Requires a car shuffle. The track commences just past Fitzroy Falls and follows the Pipeline Fire Trail out to the Pipeline Lookout which is a good morning tea stop. After morning tea we retrace our steps to McPhails Fire Trail which descends into Kangaroo Valley. There are some very steep sections of this track but the track winds down through lovely rainforest and around the edge of Mt Carrialoo.

Contact: Joan Lowe

P 48612996 | M 0417492981 or

E joan.lowe@bigpond.com by Thursday 16/6/12

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

PO Box 3045, Robertson NSW 2577

or President – Allan Stiles on 4885 1608

Also, we are always looking for new contributions to Eucryphia and we are grateful to those who send in contributions to help make our newsletter so interesting. If you have an essay, article, poem or photograph that you would like 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.

Visit the REPS website

www.reps.org.au