



Australia has a choice: join others to combat climate change, or stand alone

We can be proud that we are making our contribution to a global effort, or we can be embarrassed by our lethargy. Which one is it going to be?



'Our world is moving forward on climate change. If Australia goes backwards, we will be going alone'. Photograph: Murdo Macleod

There is no doubt our earth is warming and our seas rising – or that humankind is the cause. There is no evidence to refute this – or any genuine scientific counterargument in the climate change debate. This is not "absolute crap". It is the inescapable truth.

<http://www.theguardian.com/commentisfree/2014/jul/14/australia-has-a-choice-join-others-to-combat-climate-change-or-stand-alone>

One good reason why business should back the carbon price

Christine Milne ABC Environment 11 Jul 2014



Certainty is offered to business by the current climate policy.

The best opportunity Australian business has of policy certainty as the world moves to address global warming is to actively support emissions trading now.

AUSTRALIAN BUSINESS SHOULD tell Tony Abbott that he is killing certainty in Australia and that it is bad for business.

The golden rule of business is certainty. Not just in the short term but for decades to come, because unlike government, business deals in long term strategy and investment not just three year electoral cycles.

Christine Milne is leader of the Australian Greens.

<http://www.abc.net.au/environment/articles/2014/07/11/4044472.htm>

Invest in a science plan we can be proud of

By Ian Chubb

Posted Mon 2 Jun 2014, 3:15pm AEST



Photo: The good news is that we have good science and a real need for it. The less good news is that we do not seem to regard this as a high priority. (ABC TV)

Our science commitment historically has been the victim of on-again, off-again policies. That needs to change. We should invest in a national science plan that speaks to the aspirations of all Australians, writes Ian Chubb.

In the wake of the federal budget, there is a lot of talk about the future - and calls for self-interested people to think beyond themselves. To think, indeed, about our obligations to our children and grandchildren.

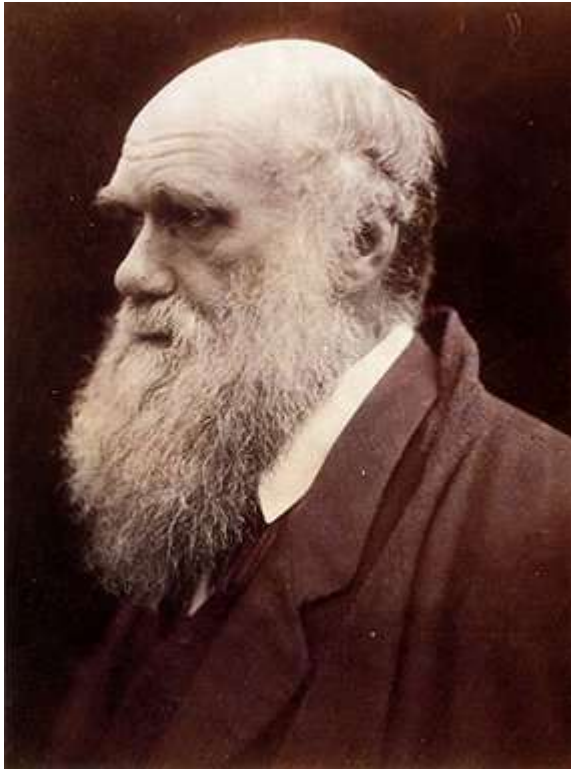
Professor Ian Chubb AC is Australia's Chief Scientist

<http://www.abc.net.au/news/2014-06-02/chubb-invest-in-a-science-plan-we-can-be-proud-of/5493390>

A debate to defend science

Should scientists debate creationists about evolution? Yes, science must step up to the plate and defend itself from all attacks, argues Paul Willis.

By Paul Willis



Darwin Day: If he were unfeasibly still alive, Charles Darwin would be 205 years old today
(Source: Julia Margaret Cameron/Wikimedia Commons)

Happy Birthday Chuck! Today, if he were unfeasibly still alive, Charles Darwin would be 205 years old. This has caused some to declare 12 February as Darwin Day; a celebration of his life and his enormous contribution to science.

Darwin has left an astounding legacy. *Origin of Species* and most of his other works are remarkable for what they got right, especially since there has been almost two centuries of revision and detailed analysis.



Dr Paul Willis is the director of RiAus, Australia's unique national science hub, which showcases the importance of science in everyday life. The well-known palaeontologist and broadcaster previously worked for ABC TV's Catalyst program.

<http://www.abc.net.au/science/articles/2014/02/12/3943295.htm>

Top five science reads of 2013

It's been a great year for science books! Devoted sci-phile blogger George Aranda shares his top five science reads of 2013.

By George Aranda



Too good to put down: There were many great science reads published in 2013 (*Source: diego_cervo/iStockphoto*)

There were many great books published this year, so it was very hard to cut down the list to my top five.

A number of biographies about people in the history of science, both past and current hit our shelves such as *Tesla: Inventor of the Electrical Age* by W Bernard Carlson; and *Robert Oppenheimer: A Life Inside the Center* by Ray Monk.



Dr George Aranda teaches and conducts research in Science Education and Science Communication at Deakin University. He is interested in how blogs, narrative and books can be used to promote science engagement. He is the curator of Science Book a Day, runs the Big Ideas Book Club in Melbourne and can be found on Twitter: @popsciguyoz

<http://www.abc.net.au/science/articles/2013/12/13/3910582.htm>

Hanging up their labcoats: Australia's new brain drain

Faced with limited job opportunities, disenchanted young researchers are giving up on careers in science, writes Tim Nielsen.

By Tim Nielsen



Disenchanted young researchers are reluctantly giving up on careers in science altogether and are being lost permanently to other professions (*Source: jeangill/iStockphoto*)

January is an exciting month for those medical researchers fortunate enough to have received grant funding for new projects in 2014. But as funding success rates continue to fall, a career on the grant treadmill is looking decidedly unattractive to a growing number of younger scientists.

Last year, Professor Brendan Crabb of The Association of Australian Medical Research Institutes warned that "falling success rates on medical research grants will eventually reach breaking point and start seriously discouraging young researchers from sticking with their careers".



Dr Tim Nielsen received a PhD in biochemistry from the University of Adelaide in 2009 and performed postdoctoral work at the Women's and Children's hospital in Adelaide before reluctantly leaving research to start two businesses in the importing industry.

<http://www.abc.net.au/science/articles/2014/01/16/3926579.htm>

Dismantling years of successful water management

Jonathan McKeown ABC Environment 4 Jul 2014



Australia is such a dry country, it can't afford to fail on water management.

The dismantling of the National Water Commission denies Australia the independent expertise needed to manage this most precious resource.

THE COMMONWEALTH GOVERNMENT continued to show its lack of priority for water when it announced in the May budget the dismantling of the National Water Commission from the end of 2014. It announced no long term plan as to who will continue to manage the good work that the Commission does.

It's now up to both the water industry and consumers to make sure water stays on top of the political agenda.

Jonathan McKeown is chief executive of the Australian Water Association.

<http://www.abc.net.au/environment/articles/2014/07/04/4037901.htm>

Adventures in the Anthropocene

▶ Listen now

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📄 show transcript

Sunday 6 July 2014 7:45AM

We are entering a new geological epoch - the Anthropocene, or Age of Man. Journalist and author Gaia Vince travelled the world to understand what this new age will mean for us and future generations.



IMAGE: THE EARTH IN A HUMAN'S HAND (GETTY/LOOPS7)

<http://www.abc.net.au/radionational/programs/ockhamsrazor/adventures-in-the-anthropocene/5563360>

Growth is good – but only if it makes life better for everyone

There is a growing realisation that as economies recover, capitalism must become greener and fairer. It won't be easy



Bangladeshi activists and relatives of the victims of the Rana Plaza building collapse marking the first anniversary of the disaster on April 24, 2013. Photograph: Munir Uz Zaman/AFP/Getty Images

This time it will be different, the politicians promise. This time it has to be different, say voters. There has been plenty of talk in recent weeks about the kind of growth, and the kind of economy, we will see now that the UK is finally returning to its pre-recession strength.

<http://www.theguardian.com/business/2014/jul/06/growth-good-life-better-everyone>

Conservatism and climate science

By Don Aitkin - posted Tuesday, 24 June 2014

This post is about another article I read through a reference at Climate etc. It has the same title as this post, and was written by Steven Hayward, who is apparently a conservative thinker with an interest in 'climate change'. Judith Curry is good at excerpting bits from longer pieces, but I think the original essay deserves a proper read (she thought so too).

Hayward's main point, I think, is that conservatives are not 'anti-science' (a common charge) but that they have an abiding feeling that whatever we need to do in 'combating climate change' must be done with a recognition that freedom, or liberty, are more important. I'm not sure about my own position on this general position - what about war? But then I remember

that conscientious objectors were allowed to be so, and that their rights were respected. That gives Australia a tick. And Hayward is scathing about the dismissal of 'democracy' by those who think that saving the planet is vastly more important than democracy.

The final difference between liberals and conservatives over climate change that is essential to grasp is wholly political in the high and low sense of the term. Some prominent environmentalists, and fellow travelers like New York Times columnist Thomas Friedman, periodically express open admiration for authoritarian power to resolve climate change and other problems for which democratic governments are proving resistant precisely because of their responsiveness to public opinion - what used to be understood and celebrated as "consent of the governed." A few environmental advocates have gone as far as to say that democracy itself should be sacrificed to the urgency of solving the climate crisis, apparently oblivious to the fact that appeals to necessity in the face of external threats have been the tyrant's primary self-justification since the beginning of conscious human politics, and seldom ends well for the tyrant and the people alike.

Don Aitkin has been an academic and vice-chancellor. His latest book, *What Was It All For? The Reshaping of Australia* was published by Allen & Unwin.

<http://www.onlineopinion.com.au/view.asp?article=16430>

8 July 2014, 6.11am AEST

Carbon farming initiative will fail farmers and rural communities

AUTHOR



Penny van Oosterzee

Senior Research Adjunct JCU and University Fellow
CDU at James Cook University

DISCLOSURE STATEMENT

Penny van Oosterzee is a Director of a company that is an eligible offset project under the Carbon Farming Initiative.



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jcu.edu.au

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A property in South Australia's Clare Valley, where the farmer has planted hundreds of gum trees. David Clarke/Flickr

Australian farmers and rural land owners **are being told** that they will be given direct incentives to store carbon in the land under the federal government's climate policy. But is that really true?

Both as a researcher and as a revegetation practitioner who's looked into the costs of complying with the expanded Carbon Farming Initiative under the **Emissions Reduction Fund**, what I've seen to date makes me concerned that – paradoxically –

<http://theconversation.com/carbon-farming-initiative-will-fail-farmers-and-rural-communities-28276>

Opinion

Soil doesn't need to be a dirty word

- by Marjorie Stewart - Nanaimo News Bulletin
- posted Jul 1, 2014 at 7:00 AM

We despise soil. We tolerate endless advertising about how to get rid of dirt. We drag our children out of it. Our municipal bylaws treat it as a nuisance, to be controlled and confined. Every field of corn grown for animal feed or biogas wastes soil. We seem unable to cherish this precious substance with a view to feeding ourselves in the not-too-distant future.

Bill Mollison, the father of the permaculture movement, said, “if you plot the rise of soil scientists against the loss of soil, you see that the more of them you have, the more soil you lose.” This about sums up our love-hate relationship with the stuff from which God reputedly made our ancestor, Adam. No matter how much we know about soil, we can’t seem to bring ourselves from degrading, eroding, desertifying, salinating or finally burying soil under asphalt. <http://www.nanaimobulletin.com/opinion/265256311.html>



 Among the many downsides of natural gas extraction are the small earthquakes caused by injecting wastewater back into the earth. Above, an oil rig drills for natural gas through shale. (© Shuli Hallak/Corbis)

7 July 2014, 3.03pm AEST

Iraq crisis threatens global oil supplies and a stable Middle East

AUTHOR



Barry Naughten

Energy political economist and international relations specialist at Australian National University

DISCLOSURE STATEMENT

Barry Naughten does not work for, consult to, own shares in or receive funding from any company or organisation that would benefit from this article, and has no relevant affiliations.



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Smoke pours from the Baiji oil refinery, the largest in Iraq, by some reports under the control of ISIS forces.

The mid-June penetration of **northwestern Iraq** by **the extreme Islamists** has prompted major concerns about the world's oil supply and energy security.

The group's incursion threatens Iraq's **sovereignty** and **unity**. Identified concerns typically included the sectarianism of the pro-Shia majority government of Prime Minister since May 2006.

<http://theconversation.com/iraq-crisis-threatens-global-oil-supplies-and-a-stable-middle-east-28215>

Peak coal: why the industry's dominance may soon be over

By Fred Pearce - posted Tuesday, 24 June 2014

After a decade in which coal has been grabbing an ever-larger share of the world's energy supply, could coal's boom be about to turn to bust? Both the United States and China are planning to curb coal, and analysts say the repercussions for the global industry could be dramatic. The world may soon breathe a great deal easier, as the biggest contributor to both urban smog and climate change goes into decline.

Earlier this month, the Obama administration announced curbs on CO2 emissions from coal-fired power plants, designed to deliver a cut in U.S.

AFP/Getty Images A worker shovels coal at a mine facility in Anhui province in eastern China.

Fred Pearce is a freelance author and journalist based in the UK. He is environment consultant for *New Scientist* magazine and author of the recent books *When The Rivers Run Dry* and *With Speed and Violence*. His latest book is *Confessions of an Eco-Sinner: Tracking Down the Sources of My Stuff* (Beacon Press, 2008). Pearce has also written for *Yale e360* on world population trends and green innovation in China.

<http://www.onlineopinion.com.au/view.asp?article=16432>

Kimberley fracking plans deserve rigorous environmental assessment

By Wade Freeman - posted Friday, 20 June 2014

When a new extractive industry – particularly one as large, unproven and controversial as fracking – moves in to an area of high conservation value, you would think it would warrant a detailed examination and thorough assessment by the state government's environment protection agency. Apparently not in Western Australia in 2014.

WA's Environment Minister, Albert Jacob, has just dismissed 48 appeals to the decision of the state's Environmental Protection Agency (EPA) to allow Buru Energy to proceed with its large scale fracking program upstream from the National Heritage listed West Kimberley region without any formal environmental assessment.

Wade Freeman is Kimberley Project Officer for ACF and a long time Broome and Kimberley local. He has many years experience working and living in remote locations such as Mulan Aboriginal Community, Tanami Desert and Oecusse, East Timor. Wade is a post grad in Community Development at Murdoch University.

<http://www.onlineopinion.com.au/view.asp?article=16423>

Climate debate trashed for short-term gain

By Ian Verrender



Photo: Tony Abbott's Direct Action plan will

herald a new age in corporate welfare ([AAP: David Crosling](#))

The debate around climate change in Australia has turned into a circus over the years, and all because of one thing: money, writes Ian Verrender.

"The world's climate scientists have provided us with a clear message - that the balance of evidence suggests humans are having a discernible influence on global climate."

As the Senate shimmies and shakes to Clive Palmer's bizarre dance routine around the carbon tax, and with the Federal Government looking increasingly desperate to deliver on a major election plank, it is worth harking back to these words, uttered by an eminent Australian.

The year was 1997. And the landmark speech - Safeguarding the Future: Australia's Response to Climate Change - was seen as a turning point, an awakening even, for the nation and its attitude towards a global challenge.

Ian Verrender is the ABC's business editor.

<http://www.abc.net.au/news/2014-07-14/verrender-climate-debate-trashed-for-short-term-gain/5593536>

Ending the age of entitlement for coal

Nicholas Aberle ABC Environment 10 Jul 2014



Burning coal has a limited future for the Latrobe Valley

Governments, both state and federal, keep handing buckets of money to the Latrobe Valley coal industry. When will they learn it's a strategy that's not working?

JUST A LITTLE OVER two years ago the now-Treasurer Joe Hockey proclaimed to a conservative think tank in London that the "age of entitlement is over" but nowhere in his speech did he mention the coal industry.

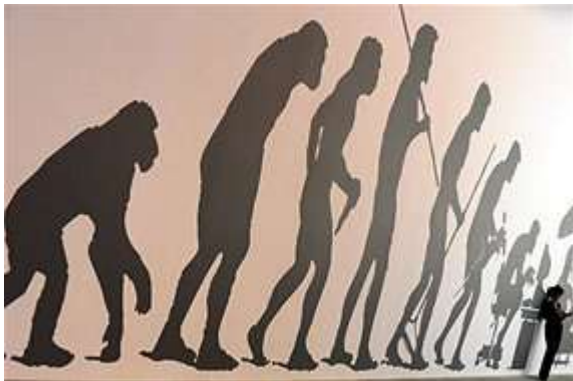
Nicholas Aberle is Safe Climate Campaign Manager for Environment Victoria

<http://www.abc.net.au/environment/articles/2014/07/10/4041826.htm>

The evolutionary path to us: straight line or forks in the road?

The depiction of human evolution as a simple linear affair is not only laden with historical baggage, it incorrectly portrays the true complexity of our past, argues Darren Curnoe.

By Darren Curnoe



Evolutionary fail: linear depictions of human evolution are not only outdated they play into the hands of wannabe scientists. (*Source: David Hecker*)

Search "human evolution" in Google images and what you'll get is an abundance of stereotypical images of an idea deeply embedded in our subconscious, the inevitable line or ladder of human evolution:

Step 1, crouching hairy ape resembling a chimpanzee with a bad back;

Step 2, ancient ape learns to squat;

Step 3, ape corrects bad posture;

Step 4, upright ape begins to lose skin colour;

Step 5, almost-human creature has picked up a spear, grown a beard and donned a roughly hewn leather skirt; and

Step 6, big-brained pale skinned man wearing a tailored leather mini (or Armani suit if you prefer) arrives in crowing glory, carrying a beautifully crafted spear (or brief case or even mobile phone).



Associate Professor Darren Curnoe is an evolutionary biologist at the University of New South Wales. He writes about all aspects of evolution on his blog *Walking on Two Feet*.

In 2008, Curnoe and colleagues discovered the remains of ancient humans dubbed the 'Red Deer Cave people'. This discovery is featured in the documentary *Enigma Man: A Stone Age History*, which airs tonight on ABC 1 at 8.30 pm.

<http://www.abc.net.au/science/articles/2014/06/24/4027999.htm>

14 July 2014, 4.04pm AEST

What climate tipping points should we be looking out for

AUTHOR



Andrew Glikson

Earth and paleo-climate scientist at Australian National University

DISCLOSURE STATEMENT

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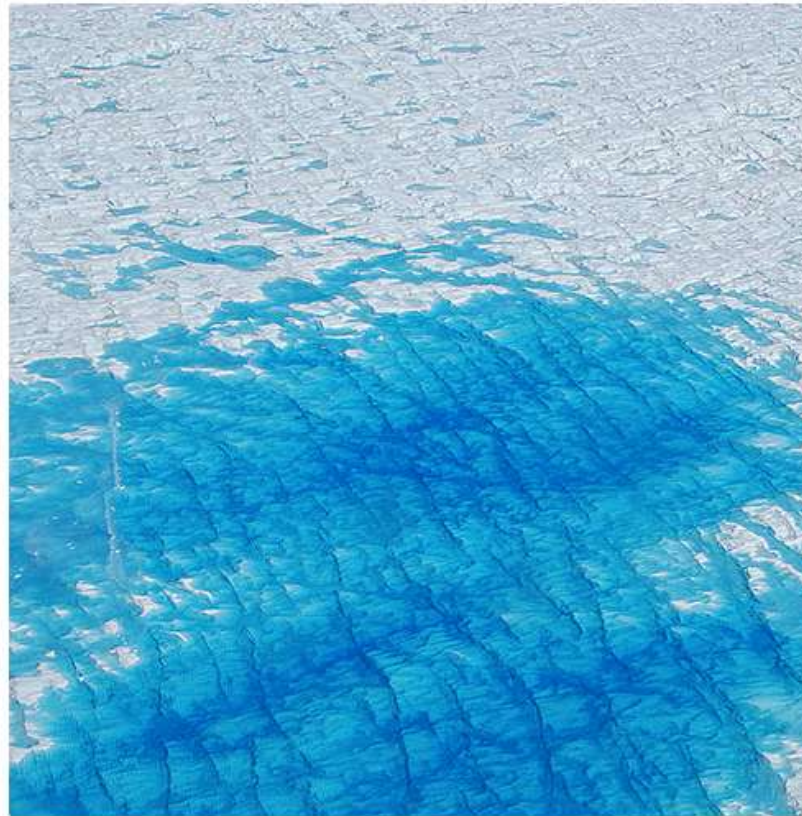
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Melt pond on the Greenland ice sheet. NASA / Michael Studinger

The concept of a “tipping point” – a threshold beyond which a system – is becoming a familiar one in discussions of the climate.

Examples of tipping points are everywhere: a glass falling off a table, a population hitting a level where it pushes your body into fever, the melting of a cube of ice being thrown into warm water, where it rapidly melts.

<http://theconversation.com/what-climate-tipping-points-should-we-be-looking-out-for-27108>

Carbon confusion: sloppy policy or worthy amendments?

By The Drum

Updated 5 hours 4 minutes ago



Photo: The Palmer United Party's amendment to the carbon tax repeal bill has caused some confusion in Canberra this week. (AAP: Dan Peled)

Confusion reigns in Canberra over the Palmer United Party's amendment to the carbon tax repeal legislation. The Drum isolates the sticking points and asks you to judge for yourself.

The Palmer United Party intended for its amendment to require power companies to pass on any savings they made from the repeal of the tax to consumers, or face a hefty fine.

<http://www.abc.net.au/news/2014-07-11/drum-carbon-confusion-sloppy-policy-or-clear-cut/5589858>

Wading through the chemical soup: how science can miss the point

Poorly constructed messages that ignore the public's fears about the impact of chemicals in our environment sidelines science from the debate, argues Paul Willis.

By Paul Willis



When 'don't panic' articles are put out by scientists that do not address the roots of the panic, they will only be dismissed by the public (*Source: Anglesey/iStockphoto*)

There's been a bit of activity of late surrounding popular concerns over chemicals and their proliferation in our lives.

Unfortunately, scientists and their science communicator brethren have made a dog's breakfast of trying to bring a bit of light and clarity to the discussion.



Dr Paul Willis is the director of RiAus, Australia's unique national science hub, which showcases the importance of science in everyday life. The well-known palaeontologist and broadcaster previously worked for ABC TV's Catalyst program.

<http://www.abc.net.au/science/articles/2014/07/09/4041831.htm>



Is Soil Renewable or Non-Renewable?

JUNE 30, 2014 / LEDA MARRITZ
BLOG ENTRIES SOIL

Q: I recently got into a conversation with someone who claimed soils are a renewable resource because the nutrients in them can be replaced with fertilizers. But I've heard that soil takes a really long time to form, so that to me makes it non-renewable. What's your opinion?

A: The idea that soil is renewable because nutrients can be replaced is very limited in scope, only addressing crop production. This perspective does not consider how soil forms, or that it's much more than just a medium for growing plants.
http://www.deeproot.com/blog/blog-entries/is-soil-renewable-or-non-renewable?utm_source=rss&utm_medium=rss&utm_campaign=is-soil-renewable-or-non-renewable

The baffling Gore and Palmer show

Sara Phillips ABC Environment Updated 26 Jun 2014 (First posted 25 Jun 2014)



Climate change campaigner and former US Vice President, Al Gore

Has Palmer played Gore for a fool or is it the other way around?

AL GORE became the face of climate change back in 2006, when he released the documentary *An Inconvenient Truth*. He climbed aboard a cherry-picker to emphasise just how shocking the rise in global temperatures has been relative to the last few thousand years.

It was a ground-breaking film on a number of levels. The film was very, very effective at spreading the message about climate change. Coupled with Sir Nicholas Stern's economic report on the threat of climate change, suddenly the whole world was talking about climate change. <http://www.abc.net.au/environment/articles/2014/06/25/4033168.htm>

9 July 2014, 6.14am AEST

How pushing water uphill can solve our renewable energy issues

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Water storage is used to smooth the output from hydroelectric power - but it can be used with other renewables too. Kraft/Wikimedia Commons, CC BY-SA

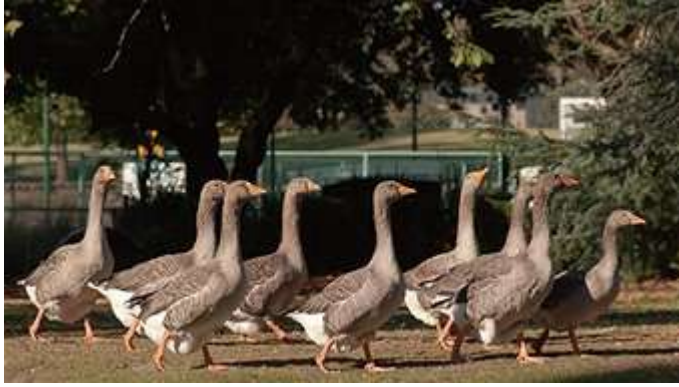
More and more renewable energy sources are being plugged into Australia's energy grids. South Australia, for example, will get 40% of its electricity from wind and solar when the **Snowtown wind farm** is completed later this year.

But if renewable energy is ultimately to dominate the market, we will need ways to store energy so we can use it round the clock. The good news is that it is easy to store energy. All you need is two small reservoirs – one high, one low – and a way to pump water between them.

<http://theconversation.com/how-pushing-water-uphill-can-solve-our-renewable-energy-issues-28196>

Wildlife flourishes in a humble suburban park

Bill King ABC Environment 11 Jul 2014



Kakadu it ain't, but the local park still affords the opportunity to get close to nature.

The hundreds of suburban parks around the bigger cities of Australia may seem too humble at first glance to offer anything to people wanting to see a glimpse of the wild but will reward those who go for a closer look.

<http://www.abc.net.au/environment/articles/2014/07/11/4040981.htm>

Who's afraid of GMOs?

Opposition to genetically modified crops is fierce, but how much of the anti-GM stance is based on science? Not a lot, argues Paul Willis.

By Paul Willis



Although GMO corn syrup and GMO sugars (including GMO dextrose) are derived from genetically modified plants, they contain no GM material (*Source: pkripper503/iStockPhoto*)

Don't you hate it when another of your favourite foods or other indulgences turns out to be bad for you? I was doubly taken aback when an article came across my desk recently suggesting I should stop drinking some of my favourite beers.

Not that I hold onto my faith in beer with an almost religious fervour but to have my devoted worship of the amber God brought into question only compounded my indignation. But shock turned to anger when it became apparent that this maligning of my holy water was largely built on nonsense and non-science.



Dr Paul Willis is the director of RiAus, Australia's unique national science hub, which showcases the importance of science in everyday life. The well-known palaeontologist and broadcaster previously worked for ABC TV's Catalyst program <http://www.abc.net.au/science/articles/2014/05/28/4013694.htm>

2 July 2014, 5.10am AEST

Wild creatures of the tropics being lost before they're found

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Like many animals in the tropics, tree kangaroos are facing threats to their survival in the wild. Mark Ziembecki/NC-SA

*Our Tropical Future: A new report on the **State of the Tropics** has revealed the challenges facing human and environmental health in the Earth's tropical regions. This is the first part series about the new report, based on the work of **12 universities and research institutions worldwide**, which shows the challenges facing diverse nations from **Burma/Myanmar** to manage those changes.*

<http://theconversation.com/wild-creatures-of-the-tropics-are-being-lost-before-theyre-found-27188>

It was the superlative productivity and durability of the soils which made the first Egyptian civilization possible.

-

Vernon Carter and Tom Dale (1973)