



NEWSLETTER

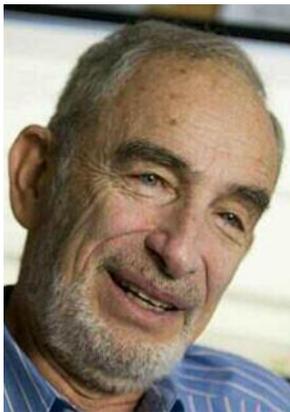
Sustainable Population Australia Inc

No. 112
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Patrons
Professor Ian Lowe
Dr Mary White

Senator the Hon Bob Carr
Professor Tim Flannery
Dr Paul Collins

Experts address population, resources & climate nexus



Prof Paul Ehrlich

On October 10 and 11, renowned population biologist, Professor **Paul Ehrlich**, will join other experts in the field of population, resources and climate change in Canberra at the annual Fenner Conference on Environment. This year, the conference is being organised on behalf of the Australian Academy of Science by Sustainable

Population Australia (SPA). The conference is named for the late Frank Fenner who was a much loved Patron of SPA until his death in 2010.

The conference will explore the nexus between population, resources and climate change and treat these considerable challenges in a holistic way. Speakers have been asked to move beyond their own particular expertise and draw the connections with at least one of the other subjects of the conference which has as its title: *Population, Resources and Climate Change: implications for Australia's near future*.

So just what are the connections between these three issues? For instance, Professor Ehrlich will argue that the more people there are, the more food production needs to be expanded. Yet agriculture is a major emitter of greenhouse gases that destabilise climate. Climate change, in turn, threatens food production that supports the human population.

Chief Executive of the Murray-Darling Basin Authority, Dr **Rhondda Dickson**, will speak to the Basin Plan which, for the first time, establishes an environmentally sustainable level of take. Coupled with water market reforms, and a conservative water allocation framework, this allows for an adaptable and flexible approach to dealing with the effects of climate change as they emerge.

In addressing all three issues, oil analyst **Ian Dunlop**

will stress the need for integrated action, noting we may have already entered the arena of dangerous climate change. Our inaction in refusing to initiate serious mitigation measures, with continuing expansion of fossil-fuel investment, is today cutting off our options to make the transition to a low-carbon society in good order, and locking-in potentially catastrophic outcomes. 'Put simply, business in a 4°C world is not possible... The implications for the carrying capacity of Australia are profound'.

The conference will be opened by Professor **Suzanne Cory AC**, President of the Australian Academy of Science. Other speakers at the conference are Dr **Bob Birrell**, Australia's foremost exponent on population and immigration issues; Dr **Paul Collins**, historian, author, broadcaster and SPA Patron; **Julian Cribb**, author, journalist, and science communicator; Professor **Chris Dickman**, terrestrial ecologist from Sydney University; Dr **Michael Lardelli**, geneticist, peak oil expert; Major-General the Honourable **Michael Jeffery AC**, Australian Advocate for Soil Health and former Governor-General; Professor **Gary Jones**, Chief Executive of eWater, and Chairman of the International Riverfoundation; Dr **David Lindenmayer**, author and leading conservation biologist; Professor **Tony McMichael**, international expert on population and health; Dr **Simon Michaux**, mining engineer; **Sharyn Munro**, author of *Rich Land, Wasteland - how coal is killing Australia*; **Mark O'Connor**, author, poet and environmentalist; Dr **Jane O'Sullivan**, widely recognised for quantifying the infrastructure cost of population growth rate; Professor **Hugh Possingham**, founding member of the Wentworth Group of Concerned Scientists; Dr **Michael Raupach** CSIRO Earth System scientist and Fellow of the Australian Academy of Science; Professor **Roger Short**, academic, author and long-time advocate of family planning; **Kelvin Thomson**, recently re-elected Federal Member for Wills and outspoken proponent of population stabilisation; and Dr **Haydn Washington**, author, environmental scientist and activist.

Planet's future is upon us

Ian Dunlop



Ian Dunlop

Our ideological preoccupation with a market economy is rapidly leading towards an uninhabitable planet.

For the Prime Minister the mining boom is over, for the Minerals Council it is never-ending, for the Reserve Bank it is somewhere in between.

But mainstream politics, business and bureaucracy alike are united in the view our prime objective must be to reinvigorate economic growth. What escapes them is that conventional economic growth in the developed world, and to a lesser extent in the developing world, is now grinding to a halt, probably permanently.

The causes are not the traditional villains of boom and bust in the business cycle, inappropriate tinkering with financial levers or corrupt conduct by banks, but the emergence of real global biophysical limits, brought about by the combined exponential increase in population and consumption. These limits are the underlying causes that have prevented the US and Europe from shaking off recession since 2008, and are behind the current crises in Egypt and Syria.

In essence we have 20th century leaders trying to reactivate the growth model on which we have relied since World War II, in a 21st century world subject to fundamentally different biophysical constraints.

Humanity is now the dominant global force. What was workable in a relatively empty world of 2 billion to 3 billion people postwar is not workable in today's world of 7 billion, let alone the 9 or 10 billion to come. Humanity today requires, on average, the biophysical capacity of 1½ planets to survive.

If everyone lived at US levels, we would require five planets, at Australian levels around four planets. This is clearly unsustainable as we are fast destroying the global commons of clean air, water and the fertile soil and oceans on which we depend for our food supply and life support. Our ideological preoccupation with a market economy, based on political expediency and short-term profit maximisation, is rapidly leading towards an uninhabitable planet.

The immediate pressure points are the inter-related issues of energy, water and food security, but particularly climate change. As a result, progressive leaders around the world are beginning to acknowledge

present business models cannot continue.

The World Economic Forum has, for years, identified climate change as one of the main risks to business viability. Others urge business to move away from the short-termism that dominates business thinking, refocusing on the long term and incorporating a wider range of social and environmental considerations in decision-making. These efforts, while laudable, have not yet had any substantial impact.

What we are not facing up to is that the only realistic way now to avoid catastrophic climate change, is to immediately halt any new high-carbon development and to initiate emergency action by placing economies on a war footing to rapidly implement low-carbon restructuring. However, pressure is mounting, particularly from the supranational organisations such as the World Bank, OECD, International Energy Agency and the International Monetary Fund. As Christine Lagarde, head of the IMF, bluntly put it at the 2013 Davos meeting: "Unless we take action on climate change, future generations will be roasted, toasted, fried and grilled."

There is no inkling of this anywhere in the Australian election debate. The two main parties are preoccupied with important, but basically second-order issues. The premise of mainstream political and business thinking is that, post-election, our high-carbon lifestyle can continue on its merry way.

Climate change barely rates a mention, with the main parties, urged on by myopic business leaders, intent on neutering the inadequate climate policies that already exist. Energy, food and water scarcity are totally ignored.

Yet these are the priority issues that are going to determine virtually every government policy and business strategy from now on, whether politicians or business like it or not. The only party with the guts to address the real challenge is the Greens.

To use a business school analogy: "Management is efficiency in climbing the ladder of success; leadership determines whether the ladder is leaning against the right wall." The ladders of the two main parties are firmly stuck against the wrong wall.

Australia has solutions, with its enormous ingenuity and low-carbon resources, which open up great opportunity in a low-carbon world, but only if we are honest about the real challenge and initiate our own emergency action. At present, procrastination by our supposed leaders is cutting off our options to make the transition to a low-carbon society in good order.

The real judgment electors must make on September 7

has nothing to do with the policies tossed around like confetti over the past few weeks, but who is best to lead us through the greatest discontinuity the world has ever experienced - the transition to a low-carbon society.

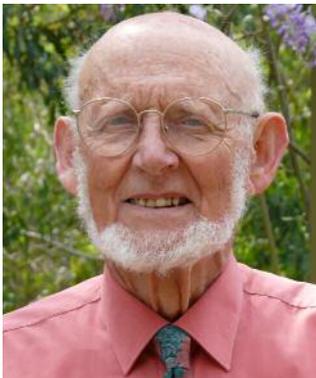
On that score neither of the two leaders on offer impress. We are long overdue for some 21st century political groupings to move the ladder on to the right wall.

Ian Dunlop is a former oil, gas and coal industry executive and a speaker at the Fenner Conference on Environment.

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The wrong way

John Coulter



John Coulter

As science warns of impediments to business as usual (BAU) both major parties seem oblivious or uncaring about these warnings. Nor does the main-stream media pay much attention and rarely draws conclusions from these warnings that bear on the imminent federal election.

An appropriate label for the election coverage would be the traffic sign on many freeway interchanges 'Go Back You are going the Wrong Way'.

Energy (joules and kilowatt hours) is what drives the human enterprise. It is not money. Without an energy flow nothing changes. About eighty per cent of global energy is presently derived from fossil fuels. Humanity exploits these energy sources in exponentially increasing amounts. But the higher grades and more easily accessed of these resources are rapidly being exhausted. The harder to get deposits require more energy to obtain and to use. We are rapidly approaching a time when the energy costs of getting energy will greatly reduce the availability of this one resource that makes all other resources available.

The fundamental flaw in the thinking of both main party leaders is their failure to understand the impact of exponential growth occurring on a finite planet. Both continue to link Australia's future to the continual growth of the Chinese economy. This is growing at 7% pa which means that it will double in size in just ten years. A most important but little recognised characteristic of exponential growth is that within each doubling period more resources are consumed than in

all previous history.

Both Mr Rudd and Mr Abbott will try to achieve a growth rate for the Australian economy of 3%. If achieved the Australian economy would be twice as large 23 years from now and in that 23 years more resource would flow through the economy than in all previous history. Most other countries will try to achieve similar growth. These enormous demands on a finite planet cannot and will not be met.

Humanity is not living environmentally sustainably now, either globally or within Australia. Emerging energy constraints make it certain that these exponentially increasing demands on planet Earth cannot be met and well within these time-frames economic growth will cease.

This general analysis based on the mathematics of exponential growth is backed by many studies of concrete examples. The 1972 'Limits to Growth' report from MIT and the Club of Rome projected forward a number of factors: population, resource use, pollution etc. within a number of different scenarios. One of these scenarios was 'business as usual' which they called 'the standard run'. This scenario indicated an economic collapse within the first half of the present century. This study was much criticised at the time by conventional economists. However, real data is now available with which to compare the 'Limits' projections. Dr Graham Turner of CSIRO has carried out two studies using the actual data from the last 30 and now 40 years and has shown that we are indeed right on track with the 'Limits' BAU scenario. This is the very track our leaders are pushing us toward.

Energy is the fundamental driver of production and therefore of the economy. It was the emergence of cheap and abundant energy that facilitated rapid economic growth and the exponential increase in the exploitation of all other non-renewable resources from about 1800 to recent years. But the era of cheap energy is now closing. Conventional petroleum resources, on which so much of our production is critically dependent, including food and water, peaked in 2006. The present plateau of production/consumption has been extended perhaps to 2015/16 by the exploitation of expensive and hard to get petroleum resources such as 'tight oil' by fracking and deep-ocean drilling. After that, while demand may try to grow, supply will fall ever further behind.

Herein lies a paradox. Two outcomes are possible and neither is within the mindset of our would-be leaders.

If fossil energy sources do peak as many predict: oil in two or three years, coal and gas a decade or so later, then the worst effects of climate change are avoided but

the growth economy crashes and cannot bounce back.

· If through advanced technology we can maintain the use of fossil fuels for a few decades longer, then in a growth oriented economy climate change tips over into a cataclysmic 4 - 6°C rise; the economy and humanity are decimated.

What is clear is that our leaders need to understand that continual growth of GDP is neither desirable nor possible. Our leaders and many media commentators seem not to understand that GDP is a very poor measure of human welfare. Many renowned economists, a few political leaders in other countries and the UN are now looking to much better, more comprehensive measures of human progress.

The policies of our two main parties bear no relationship with this analysis. Both will try to expand the economy: praising and calling for more increase in 'consumption', i.e. ever greater demand on a finite natural environment. Both will assist conventional transport: assistance to the car industry, more money for roads. Both will assist the further expansion of fossil fuel use through exports and encouragement for fracking in the Cooper basin and elsewhere. Both favour high immigration which together with strong encouragement for more consumption imposes a double whammy on Australia's natural environment.

Recognition of the need for a radical change of economic and social direction is inevitable. We need to face it now when there are still supplies of relatively cheap but soon-to-be-declining readily available energy and to use that energy to make the transition to a society based on renewable sources living a dynamic steady-state economy. Once these traditional energy sources are beyond reach it will not be possible to build the renewable energy infrastructure.

It seems to me unlikely that either would-be leader will embrace this alternative view but that within the lifetime of the incoming government our energy/resource/economic system will begin to seriously unravel. The then leader will not understand what is happening and will have no answers.

At this crucial time in human history Australian politics could not be in worse hands.

Dr John Coulter is a former leader of the Australian Democrats and former SPA national president. This article appeared in OnLine Opinion on 2 September 2013. Reprinted with permission.

In 2005, John Coulter took Al to the Physics Department at the University of Adelaide, so that he could see some of the original instruments used by the Braggs, father and son, who both won Nobel prizes for their work on X-ray crystallography.

Prof Albert A Bartlett

Al Bartlett died peacefully aged 90 in the early afternoon of 7 September, surrounded by his four daughters. The eldest, Carol, who had accompanied him to Australia in 2005, wrote the next day: "In the last two months after he left his beloved tent camping trip at Rosy Lane, he was blessed to have so much quality visiting time with all of us in the family and a great many friends. He made his final journey pain free..."

Al accepted his fate gracefully when told he had five weeks to live, the lymphoma having reasserted itself. He lasted eight. It gave us time to write and say how much we appreciated what he had done for the cause of population, how much we had enjoyed being with him. His advocacy for zero population growth and other environmental causes was internationally recognised, but he is best known for his acclaimed public lectures on *Arithmetic, Population and Energy*. He gave the lecture 1742 times in 49 states and seven foreign countries. The lecture, viewed five million times, is available online on

<http://www.youtube.com/watch?v=F-QA2rkpBSY> . In his lecture, Al concludes with the words that will live long after him: "The greatest shortcoming of the human race is our inability to understand the exponential function... Can you think of any problem in any area of human endeavor on any scale, from microscopic to global, whose long-term solution is in any demonstrable way aided, assisted, or advanced by further increases in population—locally, nationally, or globally?"

Based in Boulder, Colorado, Al Bartlett was one of the most revered and successful teachers in Colorado University's history, teaching introductory physics to generations of young scientists and engineers, winning numerous distinguished awards in the process.

His friend Jack Alpert said it for all of us:

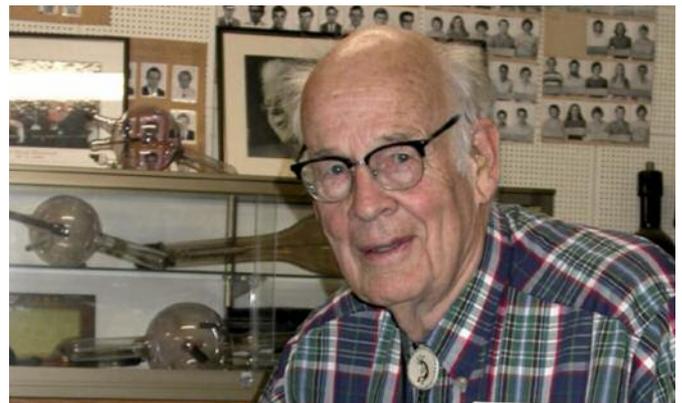
He guided me.

I hope he has guided us all.

I will miss his warmth.

His ideas will live on because they are fundamental.

Jenny Goldie



Fenner Conference

Last chance to book!



**Population, Resources
& Climate Change**
implications for Australia's near future

FENNER CONFERENCE ON ENVIRONMENT

10, 11 October 2013

Shine Dome, Acton, Canberra

Organised by Sustainable Population Australia

Book online at:

<https://www.amlink.com.au/secure/html/fenner2013.html> or www.population.org.au.

The conference program can also be found at www.population.org.au

For those of you who cannot make the conference, never fear, a book will be published soon afterwards as well as audiotapes of the presentations. We'll keep you posted!

Open conference



Professor Suzanne Cory, AC

is one of Australia's most distinguished molecular biologists. She gained her PhD from the University of Cambridge and then continued studies at the University of Geneva before returning to Melbourne in 1971. From 1996

to 2009 she was Director of The Walter and Eliza Hall Institute and Professor of Medical Biology of The University of Melbourne. She is currently a Vice-Chancellor's Fellow at the University of Melbourne and Honorary Professorial Fellow at the Walter and Eliza Hall Institute. Her research has had a major impact in the fields of immunology and cancer and her scientific achievements have attracted numerous honours and awards. In 2010 she was elected President of the Australian Academy of Science.

After dinner speaker



Dr Richard Denniss is Executive Director of The Australia Institute, a public policy think tank based in Canberra. An economist by training, Richard has worked for the past 20 years in a variety of policy and political roles. In recent years he has been at the

forefront of the national policy debates surrounding

climate change policy and the Australian mining boom. He is an Adjunct Associate Professor at the Crawford School of Economics and Government at the Australian National University. Richard has published extensively in academic journals, has a fortnightly column in The Canberra Times and Australian Financial Review and was the co-author of the best selling *Affluenza* (with Dr Clive Hamilton).

Summing up



Professor Roger Short held a number of academic posts in the UK and US before taking up a Personal Chair in Reproductive Biology at Monash University in 1982. Since 1996 he has been Wexler Professorial Fellow at the Royal Women's Hospital. He has published over 300 scientific

papers and his most recent book, co-authored with Dr Malcolm Potts, was called, "Ever Since Adam and Eve: the Evolution of Human Sexuality". For many years he was Chairman of the Board of Directors of Family Health International (FHI), one of the world's largest NGOs dedicated to providing family planning services for developing countries. At Monash University, he pioneered an innovative school sex education campaign which is now being copied around the world.

Chair of two panel sessions



Professor Ian Lowe AO is an emeritus professor in the School of Science at Griffith University and is president of the Australian Conservation Foundation. His principal research interests are in policy decisions influencing the use of energy, science and technology; energy use in

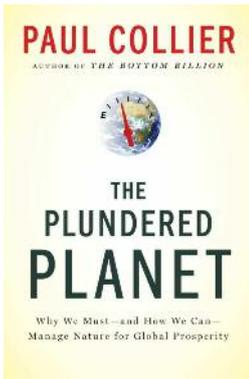
industrialised countries; large-scale environmental issues and sustainable development. In 1988 he was Director of the Commission for the Future. He chaired an advisory council that produced the first national state of the environment report in 1996, and delivered the ABC Boyer Lectures in 1991. Professor Lowe was awarded a Centenary Medal in 2002 for contributions to environmental science and won the Eureka Prize for the promotion of science.

The Plundered Planet

Conference sponsored by:



Book Reviews



by *Paul Collier*

Penguin, UK, 2010

Reviewed by *Peter Martin*

Having stumbled across this book in my local library, and feeling that I should at least attempt to read something by a respected mainstream economist instead of only books challenging our economic system, I took the plunge. After all, it comes highly

recommended by both Bob Geldof and Nicholas Stern!

Paul Collier, Professor of Economics at Oxford, really is descended from a family of colliers. Better known as author of the *The Bottom Billion* on the world's poorest, and as a previous Director of Development Research at the World Bank, he is well positioned to advise developing countries on resource development. He's done lots of it, especially in Africa, and has a repertoire of examples of ruthless exploitation. He gives examples of corruption at the highest levels (running to hundreds of millions of dollars for individual ministers in Africa), incompetence and lost opportunities to invest the one-off bonanzas from the exploitation on non-renewables in worthwhile social and economic development.

Collier is very good on the realpolitik of multinationals doing resource development in the third world, on exploration, cutting deals with national governments and the politics of in-country project management. He is keen on the idea of an international charter that requires transparency in resource development projects as a way of halting corruption. He also sees international cooperation as weakening at a time when it needs to be stronger to deal with global resources management issues, such as fishing and carbon. Sceptical of the ability of national governments to really cooperate, he finds hope in the emergence of internet-based movements.

Collier omits from his book, however, any mention of population as an issue, or of the idea that the world's resources have any intrinsic value, or that ecosystems and their life forms have a right to exist other than to support humanity. There is no discussion of sustainability as a concept or of its main elements, or of human wellbeing. Indeed, since cities can be centres of wealth creation, he argues, Africa needs several new megacities.

Backed by the good reputation of Penguin books, you would expect a Professor of Economics at Oxford to be leading his peers globally in generating insights into our economic condition and future course. Yet he can write a book he calls *The Plundered Planet*, and avoid a

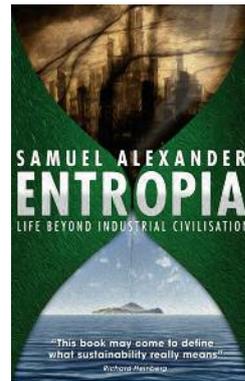
discussion of planetary boundaries, population, sustainability, and the whole purpose of economic activity, namely human wellbeing. No doubt some business leaders will find this book unsettling, since it makes some suggestions for changes in business behaviour and ethics. However, it also shows why current economic theory and practice is such a major part of the global environmental problem and not yet part of the answer.

Entropia: Life Beyond Industrial Civilisation

by *Samuel Alexander*

Published by Resilience.org, then the Simplicity Institute, 2013

Reviewed by *Nick Goldie*



Once upon a time, an eccentric billionaire devoted all his funds to the establishment of an ideal community on a remote Pacific island. The island was named Entropia, and the two thousand or

so inhabitants, descendants of the original carefully screened 'first settlers' continue to live in eco-harmony as the year 2099 dawns.

Entropia is somewhere between Utopian science fiction, and an academic thought experiment. Unfortunately, it is the academic mode which prevails. The story is told by an un-named narrator, determined to dot every "t", cross every "i", as he relentlessly itemises aspects of Entropia's existence: water supplies, food, clothing, housing, energy and so on.

Living on Entropia is somewhere between a romantic view of ancient Greece - a philosopher discoursing under every tree - and the bracingly tough life of a crofter. Happily, the founding billionaire has ensured that electric trains run on time, and that there is sufficient infrastructure to maintain a supply of bicycles, farm machinery, and biofuels. An improbable amount of the islanders' time is devoted to poetry and open-air drama performances.

Samuel Alexander is lecturer at the University of Melbourne and he has well-developed views about sustainability as an admirable goal for society. His "utopia of sufficiency" is full of interesting notions, and he paints a curiously nostalgic picture of an Arcadian lifestyle.

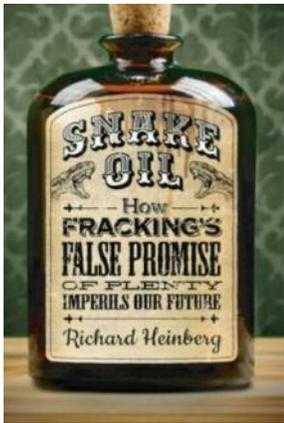
Unfortunately, there are some problems. Even in a Utopian fable, real life must occasionally intrude, and the infrastructure he describes doesn't convince. There is also a naggingly implicit issue about the fate of the rest of the world.

Book Reviews

Worse is Alexander's writing. From the beginning the narrator adopts a sonorous and rather patronising nineteenth century idiom, which becomes profoundly tiresome. Early in the book he quotes a supposedly anonymous essay, written many years in the past. Late in the book he quotes, verbatim, a long dialogue between a teacher and a student, but he fails to adjust his style to these different characters - the same academese rolls on relentlessly.

Entropia is highly praised by the likes of Richard Heinberg and Paul Gilding. I can only conclude that, for these high-powered theorists of futurology, the idea is more important than the delivery. *Entropia* contains interesting ideas, but unfortunately it is simply too easy to put to one side in favour of something better written.

Snake Oil: How big energy's misleading promise of plenty imperils our future



by *Richard Heinberg*
July 2013, Post Carbon
Institute
Reviewed *John Coulter*

This is an excellent, timely book on a matter that has become controversial. For some years the argument for a peaking of oil, gas and coal

supply based on Hubbert's early work has been gaining support. Then along comes horizontal drilling, fracking, tight oil and shale gas. Cornucopians are delighted; the peak in energy supply has been put off into the indefinite future. But has it?

And if it has what's the outlook for carbon emissions and climate change? In his final chapter Heinberg summarises this dilemma by asking what we must do.

'.....we must reduce our dependency on fossil fuels as quickly as possible. It is the only realistic answer both to climate change and our economic vulnerability to declining fossil fuel resource quality and EROEI (energy return on energy invested). This is literally humanity's project of the century, probably the most important of all of history..... With every passing year the fossil fuel industry consumes a larger portion of global GDP, reducing society's ability to fund an energy transition.'

Although the technology used to access tight oil and shale gas was developed some decades ago, it is only in the last decade that this industry has expanded rapidly across the globe. It involves drilling up to 16 drill holes horizontally, radiating out from a central point, often for

a kilometre or more into rocks containing dispersed oil or gas deposits. These are freed from the crevices and cracks in the rock by subjecting the rock to very high pressure fluids which shatter the rock and release the oil or gas which flows up the drill hole to the surface.

The energy required to obtain the gas or oil is much greater than that required for conventional oil and gas wells. Moreover, the deposits are relatively small compared with conventional deposits so the life of individual wells is short, the decline in supply rapid. Over 60,000 wells have been drilled in the US in the last decade. Continuous drilling of large numbers of wells is required to maintain supply. Much is made by this industry of the estimated size of the deposits in a region or country. But as Heinberg correctly describes, it is not the size of the reserve that is the most critical factor. It is the rate at which the gas or oil can be made available and the energy costs of making it available (the EROEI). Taking these into account, Heinberg (and other writers on this subject) suggest that the advent of tight oil and shale gas may have extended the peak by less than ten years.

The advent of shale gas depressed the US gas price such that many fracking 'plays' became uneconomic. Heinberg explores the reasons why the industry continues to seek and successfully attract investment. His claim is that it has become a Ponzi arrangement in which those who invested early seek to promote the benefits and viability of the industry so as to protect their own investment.

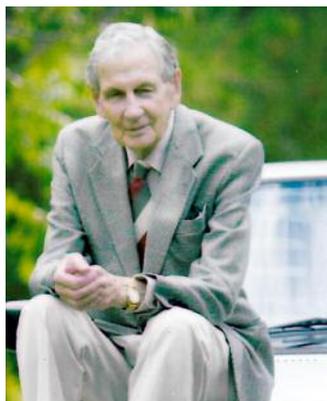
'Investment bankers make money on the way up (as bubbles inflate) and on the way down (as companies sell off assets and submit to mergers and takeovers).'

Gas is claimed as a cleaner fuel with lower greenhouse emissions. But gas from conventional wells, as well as that from fracking, is methane with a much higher climate change potential than carbon dioxide from coal burning. Leaks associated with gas exploitation and use may easily cause gas use to be a more significant climate changer than coal. This has relevance for Australia where the drilling technique has been used for coal seam gas (CSG).

Also of relevance to Australia is the damage to agriculturally productive land (a potentially indefinitely sustainable productive activity) and its replacement with damaging, short-term extraction of a non-renewable resource. The damage is not just to the surface. Wells penetrate water tables, extract large amounts of water and inject fracking fluids the composition of which is secret. The US government has

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Obituaries



Peter Tod

On 5 August 2013, Dr Peter Tod passed away at the age of 94. He was an inspiration to many environmentalists in Brisbane, and will be sorely missed.

Peter was a passionate advocate for sustainability in all its dimensions, but he was particularly concerned

about population growth. From his roots on a Darling Downs farm through a career in radiology and a long and active retirement, he developed a great interest in humanity's relationship with the natural world and concern about its mismanagement. Long before others were active on the issue, he formed an organisation called "Doctors for a Sustainable Population". He always believed that the medical profession should lead the advocacy for sustainability, as a natural extension of its commitment to human wellbeing.

His hero was Sir Macfarlane Burnett, Nobel laureate in immunology, whose 1972 book "Dominant Mammal: the Biology of Human Destiny" was among the first to break from traditional anthropocentrism and cast humanity as an animal species moulded by instincts and vulnerable to ecological constraints.

In retirement Peter set about researching and writing his own book. In 1996 he published "Stop Thieving from our Children". It was a remarkably comprehensive, coherent, intelligent and compassionate work, well ahead of its time on a number of issues. So many books on sustainability disappoint in the final chapters, with a foundering attempt at a way forward. Peter wrote with humility, yet his vision was clearer than most, and his advice more practical. Far from dated, it seems increasingly pertinent.

Peter would have been 95 next month. At no point did he retire from his quest to protect future generations. Despite increasing frailty, he attended many seminars and discussions to engage with other sustainability advocates. His stooped figure and penetrating eye were familiar sights at the monthly meetings of Doctors and Scientists for Sustainability and Social Justice (D3SJ) in Taringa. He avidly read all the new books on limits to growth, climate change, peak oil, food security and natural resources. He always had several books with him, keen to discuss the issues they raised and the actions that could best be taken to get their message out. May his memory raise us all to greater heights.

Jane O'Sullivan



Hellen Cooke

Hellen was one of nine founding members of Australians for an Ecologically Sustainable Population, later Sustainable Population Australia. In 1988, the nine of us – Chris Watson, Mark O'Connor, Hugh Oldham, Duncan Waddell, Ann

Edgeworth, Greg and Eileen Dunstone, Hellen and myself – read each other's letters on population in the Canberra Times and came together to form an organisation. We met monthly in our various homes and managed to run a successful conference at the end of our first year. Hellen was an active member of the peace movement and so lent a certain respectability to our new organisation, at least in that quarter! A few years later, Hellen moved to Melbourne and devoted her energies to the Women's International League for Peace and Freedom (WILPF). At a memorial service for Hellen in Canberra, there was genuine grief from her WILPF friends at her unexpected passing at age 77 since she had been active right up to the last. Although not involved in SPA in recent years, she is remembered fondly by long-standing members of SPA, and we extend our condolences to her children and grandchildren.

Jenny Goldie



Arthur Bassett

The Victorian and Tasmanian branch will greatly miss the unique perspective and talents of Arthur Bassett who died in August. Arthur, a lawyer who was forced to retire from his profession early in his career due to ill health was an avid reader on environment and

population and tried to provide a constant overview of new literature on immigration to other members. He was horrified at the lack of legal definition or force of the term "environmental sustainability" and moved to redress this, exploring, from the legal perspective and the Precautionary Principle the deliberate push for population growth in Australia with a deteriorating environment. This and his regular contributions to "PopForum" are among Arthur's important contributions to SPA's aim of a sustainable population.

Jill Quirk

Obituary

Keith Nesbitt

Keith Nesbitt was another SPA elder who made tremendous contributions to the population cause.

Keith was an artist and cartoonist. He drew the "50,000 years" cartoon to which Jill Quirk added colour and which generated about 20 requests to use. Most of these were from overseas.

Keith Nesbitt's latest drawing, below, arrived in my letter box in August ago with a wonderful and very sad last letter.

I suspect Keith Nesbitt's spirit may haunt our Federal Parliament for decades to come. He visited quite frequently over the years to distribute his beautiful and often biting art and his scathing diatribes on politicians and Australia's population growth. He made me laugh and also cry on a number of occasions. And I will always treasure one of the precious children's story books he wrote and produced by hand for his own grandchildren - and kindly gifted me a copy.

I will treasure it and read it to my own grandchildren as I know he has done with his grandkids. This too carries important messages relevant for the young.

Strange that I am now mourning a man I have never met, as intensely as I would the loss of a much loved and admired family member. But such are the friendships that SPA and strong dedication to the population cause can engender. *Paddy Weaver*



Report

Grain yields starting to plateau

Lester Brown, Earth Policy Institute

From the beginning of agriculture until the mid-twentieth century, growth in the world grain harvest came almost entirely from expanding the cultivated area. Rises in land productivity were too slow to be visible within a single generation. It is only within the last 60 years or so that rising yields have replaced area expansion as the principal source of growth in world grain production.

The transition was dramatic. Between 1950 and 1973 the world's farmers doubled the grain harvest, nearly all of it from raising yields. Stated otherwise, expansion during these 23 years equaled the growth in output from the beginning of agriculture until 1950. The keys to this phenomenal expansion were fertilization, irrigation, and higher-yielding varieties, coupled with strong economic incentives for production.

The first country to achieve a steady, sustained rise in grain yields was Japan, where the yield takeoff began in the 1880s. But for a half-century or so, it was virtually alone. Not until the mid-twentieth century did the United States and Western Europe launch a steady rise in grain yields. Shortly thereafter many other countries succeeded in boosting grain yields.

The average world grain yield in 1950 was 1.1 tons per hectare. In 2011, it was 3.3 tons per hectare—a tripling of the 1950 level. Some countries, including the United States and China, managed to quadruple grain yields, and all within a human life span.

Impressive though the growth is over the last 60 years, the pace has slowed during the last two decades. Between 1950 and 1990, the world grain yield increased by an average of 2.2 percent a year. From 1990 to 2011, the annual rise slowed to 1.3 percent. In some agriculturally advanced countries, the dramatic climb in yields has come to an end as yields have plateaued.

For example, the rice yield per hectare in Japan, after climbing for more than a century, has not increased at all over the last 17 years. Like Japan, South Korea's rice yield also has plateaued. Interestingly, it plateaued at almost exactly the same level as the rice yield in Japan did, and while Japan's plateauing began in 1994, South Korea's began in 1996. And a similar situation is developing with wheat in Europe. In France, Germany, and the United Kingdom, wheat yields have been flat for more than a decade.

Thus far the countries where rice or wheat yields have plateaued are medium-sized ones. What happens when grain yields plateau in some of the larger countries?

SPA News

WA The WA Government proposals to charge 457 visa holders an annual education fee of \$4000 per child generated a flood of public protest. This highlighted general confusion about these visas. Parents and a large number of talk back callers claim that the visas provide permanent settlement and entitlement to all residency benefits. The Immigration Department needs to ensure that both 457 visa entrants and the public are aware that the visas have a maximum life of 4 years. A clear statement of benefits and responsibilities of these entrants is also needed. Radio callers also claimed that family members of such entrants are usually granted permanent residency. This matter requires clarification.

The WA Committee passed a resolution that SPA should oppose all forms of financial assistance such as the baby bonus and subsidised parental leave except for the first two children. Also financial support to parents should be appropriately spread over the whole childhood period, as the heaviest costs occurred later, particularly in teenage years.

Volunteers handed out leaflets at the second Attenborough talk, although the speaker did not deal with the population issue himself but screened a brief video on this at the end of his talk.

The WA Branch finally now has a Secretary. Thanks to Mrs Nonie Atkinson agreeing to cooption to this position. Clive Huxtable had articles on population published in the Fremantle Herald and in the Post. Brad Capes kept up his stream of letters in both major and local newspapers. Our former committee member and committed letter writer, Astrid Herlihy, now seriously ill, has never the less managed to get letters published. Never has the stream of letters been so prolific or our political leaders so recalcitrant. Congratulations to all our letter writers. Keep the energy flowing. We now have a new batch of Parliamentary members to convince.

Paddy Weaver

NSW The NSW Branch will be conducting its AGM on Saturday, November 9, 11am-1pm at the Mitchell Theatre, Sydney Mechanics' School of Arts, 280 Pitt St (near Town Hall). Anyone interested in standing for office or the committee is invited to register their intention by contacting the branch before the meeting. Anyone wishing to receive a proxy voting form may also contact the branch to receive one. We are keen to see new faces on the committee so any members wishing to increase their level of involvement in SPA are encouraged to do so. The AGM will be followed by a screening of Arithmetic, Population and Energy (approx. 11.40am) as a tribute to the recent passing of Professor Albert Bartlett. This legendary video has inspired thousands of people to become involved and active in the population movement so come along

(bring some friends) and be reinvigorated by the words of the great man himself. This will be followed by a group discussion. The meeting and video screening are open to the public but only financial members of SPA will be able to vote or address the meeting. A social lunch is planned after the meeting.

Kris Spike

VIC/TAS The 2013-14 branch committee was elected at the AGM on July 20th. President- Jill Quirk, Vice President- Jenny Warfe, Secretary, Sue James, Treasurer, Vivienne Ortega,

Committee: Gloria O'Connor, Kit James and Michael Bayliss.

Jill Quirk and Michael Bayliss stepped down from their positions during the elections as they were both standing for election in the Senate and House of Representatives (respectively) for the Stable Population Party. During the election period Jenny Warfe was acting branch president.

The branch on Jenny Warfe's initiative combined with The Victorian Green Wedges, Protectors of Public Lands, (Victoria) and Planning Backlash to draft a "Sustainable Population Charter" to be distributed to environmental groups. Its introduction was heralded by a media release to which there was no response but an equivocal article appeared in the Herald Sun a little later.

ABS data published recently showed that Greater Melbourne had the largest growth of any capital and according to ABC news, "straining infrastructure and resources". The area has grown by 406,600 in the 5 years to June 2012.

The most prominent growth related issues in Victoria at present are the East-West Link which will necessitate demolition of nearby houses and will cut through Royal Park near The Zoo and the New Residential Zones whose main purpose is to fit a greater population into all areas throughout Victoria.

Jill Quirk

QLD: The Queensland Branch ran a successful stall at the Caboolture Regional Environmental Education Centre (CREEC) open day on 25 August. Branch President Jane O'Sullivan and Secretary Jan McNicol stepped down during the election campaign, as they ran as candidates for the Stable Population Party. Many SPA branch members were active during the election campaign, raising the population issue with their candidates.

We continue to run open meetings at Toowong Library on the third Monday each month. The August and September meetings were constructive discussions about how to engage the wider public with our message. The date of the branch AGM has been set for

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the evening of 18 November - please mark your diary.

Jane O'Sullivan

SA The S.A branch held its AGM on 27 July at the University of Adelaide. The meeting was followed by two talks by Simon Michaux, the first on Peak Mining, the second on Developing Self Sufficient Communities moving toward sustainability. The branch extended the invitation to Simon after his brilliant talk to the National AGM in Brisbane earlier in the year on the first of the above topics.

Again Simon gave two excellent presentations which were videoed and edited and which we have available on DVD. The DVDs are available from John Coulter at jrpfc@bigpond.com for \$12 each or \$20 for the two. This includes packaging and postage. We are hoping that these two discs and their message can be widely spread. After covering a number of non-renewable resources, the declining ore grades, the rising energy costs of extraction and the rising energy costs of energy itself Simon draws the conclusion that we are entering peak industrialisation – the end of industrial expansion as it has been over the last two centuries. Just one example of the many he provides in these DVDs; it now takes the extraction from three tonnes of rock to make one wedding ring.

There is considerable valuable detailed information in these talks and we encourage people to buy them and spread the word.

John Coulter

ACT On August 3 SPA ACT and Region held a general meeting at which Mark O'Connor gave a talk: "Human happiness in Australia: Is there a sweet-spot for population size?" Mark was a candidate for the Stable Population Party at the federal election.

SPA committee members Michael Thompson and Julia Richards set up a stall at the University of Canberra on August 21, with banners, membership forms and information about the Fenner Conference. Many people passed through. This was a special university day when many environmentally concerned groups set up to display their work.

Christopher Dorman

Population as a security issue

The national executive has since 2009 been trying to get population onto the agenda of climate change organisations, specifically, the UN Framework Convention on Climate Change (UNFCCC). Member of the executive, Dr Peter Schlesinger, feels we should also be pushing population as a security issue, especially now Australia has a seat on the Security Council. If you would like to be on a sub-committee with Peter, please contact him on peter.schlesinger@gmail.com



Simon Michaux DVDs available

From the SA branch AGM in July, two excellent presentations by mining engineer Simon Michaux. Available from John Coulter at jrpfc@bigpond.com for \$12 each or \$20 for the two.



World Vasectomy Day, 18 October

On World Vasectomy Day, surgeons from around the world will perform vasectomies, in many cases before a live audience. The event will be launched at the

Royal Institute of Australia's Science Exchange in Adelaide and before an international online audience.

This "vasectomy-athon" was inspired by New York based documentary film-maker Jonathan Stack and vasectomist Dr Doug Stein, who wanted highlight the social, cultural and ethical issues of an ever-increasing population and the effect it has on the planet's finite resources. They will be joined by Prof Paul Ehrlich who will have been keynote speaker at the Fenner Conference the week before. Dr Paul Willis, an experienced science broadcaster, will host the day.

SPA has made a small donation to World Vasectomy Day and supports it wholeheartedly.



Dr Doug Stein

Snake Oil review continued from page 7

protected this secrecy by passing the Clean Water Act in the Energy Policy Act of 2005.

Predicting the future of this industry is difficult given the data available has only accumulated over the last decade or so. That does not alter Heinberg's principal conclusion above. Any reprieve from peak oil and gas must be invested in transitioning as quickly as possible to renewable, non-carbon based sources of energy.



Karen Groves

Award for SPA's bookkeeper

In August, at an awards dinner, the ACT Chamber of Women in Business announced that Karen Groves of Successful Alliances had won the 2013 Business Woman of the Year Award.

Successful Alliances helps small to medium sized businesses and not-for-profit organisations grow through strength in numbers. It's a leading MYOB consultancy and bookkeeping practice, based in Canberra.

Karen said: "It's an honour and one I am extremely proud of. I would not have been granted this award without the tremendous support of my loyal staff and the many clients who have supported Successful Alliances over many years."

That includes Sustainable Population Australia. Well done Karen!



Scott Morrison

New Immigration Minister

With the election of the Abbot-led Coalition government, Scott Morrison retained his existing portfolio and became the Immigration Minister. The SPA newsletter editor requested an interview for this edition of the

newsletter but the Minister was unavailable. His staff, however, has promised one in time for the December issue. It remains to be seen whether the change of government will be an improvement or not in terms of population. Before the election, Mr Morrison alluded to his party's support for high immigration and the paid parental leave policy can be deemed to be an incentive for bigger families, but we will find out the full story next issue!

ABOUT SPA

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