



NEWSLETTER

Sustainable Population Australia Inc

No. 118
December, 2014

Patrons
Professor Ian Lowe
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World population still growing by 2100 – or not?

Contrary to the widely held view, global population will not stabilise mid-century after all, according to a study published in September in *Science*. The team of researchers from several universities and led by Patrick Gerland of the United Nations Population Division in New York, found that population will continue growing into the next century. There is an 80 per cent probability that world population, now 7.2 billion people, will increase to between 9.6 billion and 12.3 billion in 2100, according to the paper.

These population projections are based on extensive new data up until 2012 and a more sophisticated approach to the mathematical probabilities for fertility and life expectancy (the so-called ‘Bayesian’ probabilistic methodology).

In the study, the projected figures for Africa are alarming, with Sub-Saharan Africa growing to between 3.5 bn and 5.1 bn by the end of the century making Africa as densely populated as China is today. Nigeria alone would grow from 160m to over 900m. Fertility declines have stalled in Africa, unlike Eastern Asia and Latin America, because of failure to meet contraceptive needs, combined with the continued preference for large families. The HIV/Aids epidemic did not claim as many lives as anticipated thanks to retroviral drugs.

In a letter to *Science* in October, however, five scientists led by Wolfgang Lutz from the International Institute for Applied Systems Analysis (IIASA) in Vienna, Austria, disputed the findings of the study, criticising its methodology. They said that because young Nigerian women are now more educated than their elders, fertility is likely to decline in the near future. Thus, they argued, to assume Nigeria’s population would grow from today’s 160 m to 914 million in 2100 was ‘unrealistic’.

Lutz and his colleagues also disputed the *Science* paper’s assumption that China’s fertility would increase. Instead, they think it will decline further or stay low in coming decades, and thus “we therefore still expect the end of world population growth this

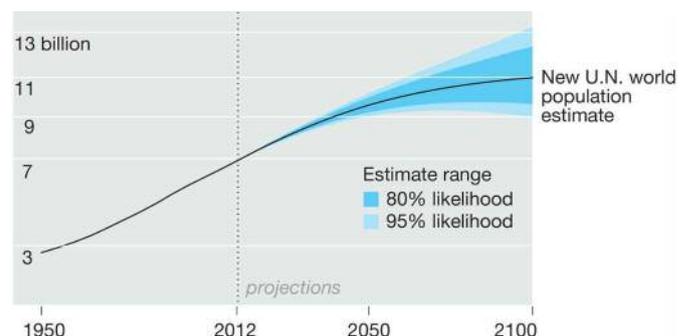
century.”

Another letter also took issue with the *Science* paper. Robert R Holt of Maine in the US wrote that Gerland *et al* had omitted one of the major determinants of population growth, namely, food supply. There was ‘no mention of agricultural limits’. Much of Africa is either desert or rainforest and the latter cannot be made arable because nutrients are stored in the living biomass and not the soil. In addition, the ‘agricultural soils that do exist are relatively infertile,’ Holt wrote.

Two members of SPA’s national executive, Dr Jane O’Sullivan and Dr Michael Lardelli, weighed into the debate, also disputing the findings of the study. O’Sullivan wrote that while we are currently on track for well over 11 billion this century, ‘mass mortality will more likely intervene. Only rapid restoration of global support for family planning programs can hope to avert this. Fatalistic projections are not helping to achieve this.’

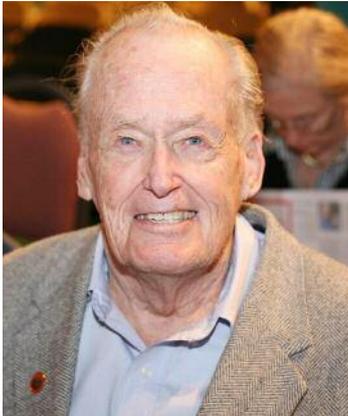
To be fair, the authors of the *Science* paper did argue that fertility decline could be helped by better access to contraception, and by the education of women. And they acknowledged that things could get worse, since the projections did not take into account the negative environmental consequences of rapid population growth.

One of those, of course, is climate change. Indeed, as Hans Joachim Schellnhuber of the Potsdam Institute said in 2009, and Australian Ian Dunlop has repeated many times since, a 4°C warmer world is a world of one billion people, not seven, let alone 12, billion. *JG*



Energy and population

Walter Youngquist



Walter Youngquist

For nearly all Earth resources we are expending more and more energy to recover lower and lower grade resources. This is especially critical in energy recovery itself where the ratio of energy recovered on energy invested (EROEI) is dramatically decreasing. Energy enters into the production of nearly everything we make and use, and in many human activities. When it takes as much energy to produce energy as the energy returned, there will be no surplus energy to power all other activities.

Oil is our principal energy source. Early easy oil discoveries had an EROEI of 100 to 1 or more. This declined to no better than 30 to 1 in the 1970s and few discoveries now are better than 10 to 1. North Sea oil has an EROEI of hardly 5 to 1, surface mined oil sands in Canada show a 3 to 1 EROEI, and ethanol barely 1 to 1, if that. The declining EROEI of oil is more significant than any additions to oil reserves. A declining EROEI is relentlessly closing on us. An industrialized economy probably cannot exist on an EROEI less than seven.

World oil discoveries in terms of volume peaked in 1965. The last giant (more than 500 million barrels) oil field discovered in North America was Prudhoe Bay in 1968. More than half the oil consumed in the world today was found before 1973. Giant oil fields are no longer being found. We are now drilling in 10,000 feet of ocean water and another 10,000 to 15,000 feet below the sea floor to find oil. Fracking oil wells cost four to 10 times more than conventional wells. Oil now coming into production is expensive. A Chevron executive recently remarked that the “old \$20 oil is now the new \$100 oil.” Cheap oil is now history. We built our industrialized economies the past two centuries on cheap energy. That era is now in the rear view mirror.

The overriding trend most striking of all is the huge and continued growth of world and U.S. populations. When I was born world population was less than two billion. Now it is more than seven billion, projected to be 10+ billion by 2100. U.S. population was less than one hundred million, now it is 317 million and projected to grow to 424 million by 2050. Human dignity becomes

lost with overpopulation; the individual is submerged in the masses. Life is cheapened. The dignity of the individual is being eroded.

Nearly all our problems are related to continued population growth, which ecologist E. O. Wilson of Harvard has called “The raging monster upon the Earth.” Almost all would be easier to solve in a smaller stabilized population. We have the Biblical admonition “Go forth and multiply.” And we surely have done that, but what inevitably must follow is “And now divide.” More people demand more of supporting resources: food, shelter, clothing, fuel. Each day at the world dinner table we have 232,000 more mouths to feed than were there yesterday. Tomorrow there will be 232,000 more. Agricultural land quantity per capita is shrinking. Food costs will continue to go higher. This is already evident.

But our political leaders and the business community seem unaware that Earth and its human-supporting resources are finite, and cannot continue to maintain economic growth as we have known it. Sustainable development in terms of more “things” is an oxymoron. This should be replaced by the concept of “better, not bigger.” But there is no plan now being pursued toward a steady state economy. We are exhorted to “buy more to keep the economy growing,” for economic growth is now the idol of economists. But economic growth based on continued exploitation of non-renewable resources is unsustainable; a fact likely to become chaotically apparent this century as humanity incrementally enters into the paradigm of a future of less.

The challenge now is to adapt to this paradigm, and the crucial adaptation must be reduction of population to a sustainable size at an acceptable standard of living on renewable resources on which humanity must henceforth survive. Continued population growth precludes the prospect of a more prosperous future for all, contrary to political rhetoric to gain votes. From what I have seen in more than 70 countries, a voluntary reduction in population seems unlikely. But as supporting Earth resources diminish, by this simple fact alone population will eventually decrease. This will be a hard, impassive solution, but nature bats last and we are part of nature. Can this conclusion be in some way avoided? This problem is now immediately before us. And time is not on our side.

*This is an edited version of the original essay: **The view from 93: Changes and Trends.** Retired Professor of Geology at the University of Oregon, Dr. Walter Youngquist is the author of *GeoDestinies: The inevitable control of Earth resources over nations and individuals.**

What is the ideal population?

by Nick Ware

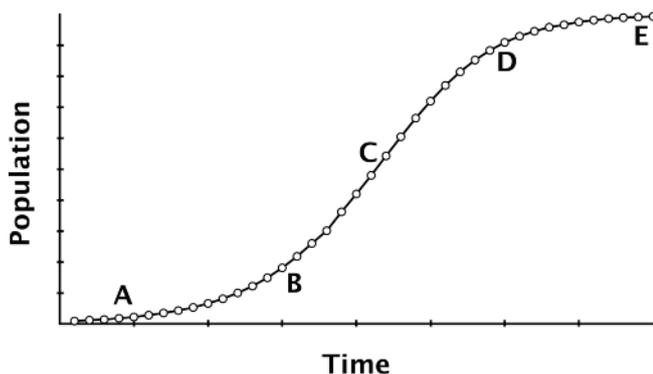


Nick Ware

Many SPA members will have heard the late Professor Al Bartlett deliver his lecture on Arithmetic, Population and Energy. They may remember a thought experiment where Al hypothesised a container containing an organism capable of doubling its population every minute. The container is full after an hour. When is it half full?

Answer: after 59 minutes.

Now, Al was intent on communicating the power of exponential growth; he knew perfectly well that real organisms do not grow in this way. An approximation to Al's thought experiment occurs in some Biology 101 courses where wheat germ is grown in a Petri dish. If a suitable culture, pH and temperature are selected the experiment is over in about 30 hours when the Petri dish is effectively full. Then the student plots out the population of wheat germ against time and a sigmoid curve known as the logistic curve is obtained. Here it is:



Thomas Malthus, like Al Bartlett, recognised that exponential growth cannot continue indefinitely and was concerned about the collapse that must occur when population outruns resources. He would ear-bash all and sundry on the subject and was known by his students at the East India College and by his fellows in the Royal Society as “Old Pop” for his pains.

Malthus was a political economist and a collector of statistics and he was not a mathematician. However, he had a strong European vogue and eventually his work inspired the Belgian mathematician, Pierre Franois Verhulst, to formulate his “law” of population growth in 1838. This was probably the first mathematical

treatment of population statistics. Verhulst derived this differential equation:

$$\frac{dP}{dt} = rP\left(1 - \frac{P}{K}\right)$$

where P is population, t time, r the intrinsic growth factor and K the carrying capacity. The solution of this equation, when plotted up, gives the logistic curve which has many other uses besides population dynamics and applies in any situation where there is a limit to growth. Thus for a single organism it is the size at maturity, in manufacturing it is the volume of the product at market saturation, for agricultural production it is the maximum yield of the crop and so on.

The world population has been tracking along a logistic curve ever since the start of the industrial revolution. Growing from about one billion in 1800 (position A), maximum population acceleration (position B) occurred in the early 1960s, the point of inflection (position C) was passed in the mid 1990s, the prediction is for around 9.4 billion by 2050 and the curve should level off at less than 12 billion by 2200 (position E). The chances of this happening are very remote and the several dangers facing humankind have been well canvassed in past editions of this newsletter. Indeed, a property of the logistic curve is that once maximum deceleration (position D) is reached, quite small downward shifts in the carrying capacity can cause a substantial Malthusian collapse.

Disregarding all this doom and gloom, in the best of all possible worlds, what should the population be? Today, at 7.2 billion, we have a footprint the size of one and a half worlds. That would indicate a realistic carrying capacity of 4.8 billion. Because the point of inflection in the logistic curve marks the point of diminishing returns, the quick answer is that the world's population should be no more than 2.4 billion. Maximum prosperity per capita may well be less than this figure.

Of late, the logistic curve has declined in favour with economists, demographers and sociologists. This is a pity because a mathematical approach does give a solid departure point for discussion.

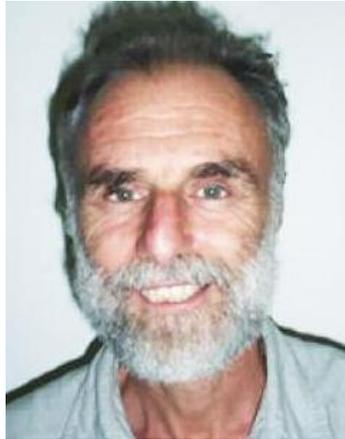
Nick Ware is President of ACT Branch of SPA

The ACT branch of SPA is co-sponsoring with the Frank Fenner Foundation the premiere of the documentary 'Surviving Earth' at the Finkel Theatre, ANU, on 8 December at 7pm (doors open 6.30pm) followed by a panel discussion. Tickets \$12/10. Pay at the door or book on-line: www.trybooking.com/GERG. The director of the documentary, Peter Downey, will join the panel.

Ebola for catastrophists

by David Kault

Many readers of this newsletter fully understand exponential growth and so worry about the contrast between the finite nature of the planet and the growth of its human population which is doubling globally every



David Kault

60 years, every 40 years in Australia. If this doubling continues, a catastrophe for humanity and the environment is inevitable.

A clash between population growth and the ability of nature to support that growth is evident for all living things, as living things exist simply because they have the ability to

multiply until limits are reached. Such issues were evident to people in ancient times when populations were much smaller but had reached the limits dictated by the technical inability of the ancients to extract more from nature.

In biblical times the limits that might be forced upon growing populations were to come in the form of the four horsemen of the apocalypse – war, famine, pestilence and death. Indeed all populations of living things are limited by either resource constraints or predation whether by microbes or large predators or by lethal competition within the population – so the four horsemen of the apocalypse are still lying in wait for today's populations. These ideas will not be new to many supporters of SPA and some may be wondering if the current ebola epidemic represents the last two horsemen of the apocalypse coming to get us. This article discusses the epidemiology of ebola and the impact it may have on human population size.

Epidemics like that of ebola follow rules which can be expressed as a mathematical model. The ebola epidemic until recently has closely followed the pattern predicted by a model known as the SIR model. The S in SIR stands for the size of the Susceptible population with I likewise standing for the Infected and R for the Recovered or dead. In this model people become infected according to the number of interactions between currently infected people and currently susceptible people. This means the epidemic takes off more rapidly when people are more densely packed. Infected people are removed from the model by recovery with immunity or by death.

The calculations show that the epidemic should be bell shaped – rising to a peak and decaying to almost nothing without infecting all of the population.

Early in the epidemic, with most people still susceptible, the average infected person has time to transmit the infection to a certain number of people before recovering or dying. That certain number is termed R_0 . If R_0 is bigger than 1, say it is 2, a reasonable figure for ebola, then on average 1 becomes 2 becomes 4 becomes 8 and so on with each generation. This is exponential growth – growth that feeds on itself, familiar to those concerned about population growth. However, the exponential phase doesn't last because the epidemic starts to run out of people to infect – the susceptibles start becoming thin on the ground and the epidemic eventually dies out. Assuming there is no change in response to the epidemic, R_0 determines the size of the epidemic. With an R_0 of 2.0, the epidemic ultimately infects about 80 per cent of the population. Unfortunately R_0 can't be measured directly. However it can be calculated if the duration of infectivity is known along with the initial rate of increase in infecteds.

It is not known what R_0 for ebola would be in a developed country. However, some inference is possible. For measles, R_0 seems to be about two thirds the value in Australia that it is in West Africa. A rough guess is then that R_0 for ebola in Australia might be about two thirds of 2.0 or approximately 1.3. This means a plane load of 100 ebola sufferers would on average generate 130 sufferers in the first Australian generation of the disease, then this 130 would become 169 and then 220 and then 286 etc, ultimately infecting about 42 per cent of the population, so it is not unreasonable for Australians to be personally worried.

However, once there is awareness of the epidemic, population behaviour changes and medical interventions to quarantine people may reduce the effective R_0 . In places interventions seem to have brought it down to below 1.0. However, elsewhere the effective R_0 clearly exceeds 1.0 as in some places the epidemic continues to grow. It is not possible to predict whether ebola will amount to a few thousand individual catastrophes or a global catastrophe especially for people in the crowded parts of the third world.

Regardless, it is a warning from nature of the disaster that can come from human beings living at ever greater densities as a result of our exponential growth in numbers.

Dr David Kault was for many years president of the North Queensland branch of SPA before it merged with SEQ to form the Queensland branch.

Obituary

Vale Tony McMichael AO

To hear the tributes that flowed in after Emeritus Professor Tony McMichael's untimely death at 71 is to appreciate the extent of our collective loss. He was not only a leading global authority on environment and health but a generous, wise and witty friend and colleague. At his memorial at the Australian National University on 25 November, Professor Fiona Stanley referred to him as "the gentle giant of epidemiology". He was, as Ian Lowe said, a "scholar and a gentleman" with a "wickedly irreverent humour". John Connor of the Climate Institute of which Tony was a founding member, said he was both "a giant in spirit" and a "fiercely competitive sportsman."

Indeed, Tony McMichael was a Renaissance man, an accomplished musician, sportsman and "an immensely distinguished colleague" as the Public Health Association of Australia said. Fiona Stanley remembered the time he and his two daughters played the violin during a break at a conference dinner. Another friend at his funeral joked how his tennis was good enough to allow South Australian Premier John Bannon to win at a time when Tony was keen to see a reluctant Bannon push through an anti-tobacco bill.

Tony had trained as a medical doctor but chose to focus on the environmental causes of ill health rather than merely treating it. In his work on public health, he had investigated Port Pirie children who were adversely affected by high lead levels. This study ultimately resulted in lead being removed from petrol. His work on passive smoking is well remembered. He brought in environmental and social aspects to medicine, previously largely ignored. He was instrumental in setting up Doctors for the Environment Australia with Em Prof David Shearman, another distinguished member of SPA.

Tony walked the world stage though, sadly, it was the pneumonia developed on a long haul flight home that led to his death. In 2011 he was made an Officer of the Order of Australia (AO), and was elected to the US National Academy of Sciences. He was an adviser on the health risks and burdens from global climate change to the World Health Organization. During 1993-2001 he headed the assessment of health risks for the UN's Intergovernmental Panel on Climate Change (IPCC), and for the (international) Millennium Ecosystem Assessment.

He joined SPA only after he retired from ANU but he had been part of the population movement for decades. Tony was mentor and friend to Colin Butler, Professor of Public Health at the University of Canberra, who wrote: "The late 1960s was a time of intense concern

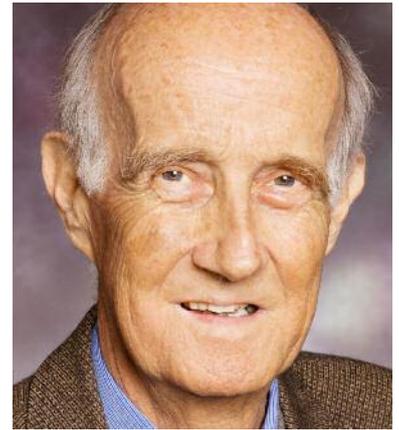
about global population growth. McMichael was influenced not only by Paul Ehrlich and Rene Dubos, but a wide cast of ecological leaders and concerns. These led to a series of essays called "Spaceship Earth" in Nation Review, a weekly newspaper. Two decades later, just when the "cornucopian enchantment" was at its peak (i.e. despite the Rio Summit, the time when the concerns about global population and global environmental impact arguably reached their nadir) he published *Planetary Overload*. Of all his books, this is the most influential and important."

To quote from the cover of *Planetary Overload*, published in 1993: "The human species faces a new threat to its health—perhaps to its survival. Our burgeoning numbers, the spread of technology, and our conspicuous consumption are overloading Earth's capacity to replenish and repair itself." One speaker at the memorial service says *Planetary Overload* ranks with Rachel Carson's *Silent Spring* in importance.

In the book's Introduction, Tony wrote: "Compared with the hunter-gatherer era, which predominated until a short 10,000 years ago, human numbers have multiplied one thousand-fold (including a massive ten-fold increase in the past 250 years) and our average, daily, per person energy use is also about one thousand times greater. Our aggregate impact upon the biosphere is therefore about one million times greater than in these pre-agrarian days. We are consequently overloading the Earth's capacity to absorb *non-toxic* waste gases, to replenish slowly renewable resources such as soil and groundwater, and to sustain genetic and ecological diversity. It is these disruptions that comprise an unprecedented threat to our life-support systems."

Tony was a speaker at the Ethics of Migration seminar in April and at the 2013 Fenner Conference on Population, Resources and Climate Change, both organised by SPA. He contributed a chapter to the book arising from the latter: *Sustainable Futures*. He features in the documentary *Surviving Earth* that premieres shortly.

Tony's family regarded his life as 'a gift'. Indeed it was, but not just to them; to all of us. His death was a matter of profound grief to both family and his many friends.



Tony McMichael AO (Photo NCEPH)

Jenny Goldie

Book Review

SUSTAINABLE FUTURES

Linking population, resources and the environment



EDITORS: JENNY GOLDIE AND KATHARINE BETTS

Sustainable Futures: Linking population, resources and the environment

Edited by Jenny Goldie and
Katharine Betts

CSIRO Publishing 2014

Reviewed by John Coulter

This volume is based on 18 of
the 20 papers delivered at the

Fenner Conference 2013, jointly sponsored by Sustainable Population Australia and the Australian Academy of Science. It is topped and tailed with an excellent introduction by Jenny Goldie and an equally excellent summary of the conference by Ian Lowe.

Environmental issues/problems are usually dealt with in the media in isolation of each other and of the mainstream growth oriented ideology. This conference and the book very successfully link together the numerous elements that describe the increasingly precarious relationship between humans and the natural environment. My main concern is that those who choose to read this book are likely to be already on its wavelength while the many among politicians and media who muddle-headedly believe that BAU with a little twiddling around the edges will get us through impossible times are less likely. But it is those who need to read it. The book lays upon those who understand its message the task of convincing these latter types they should read it.

It's impossible in a short review to mention all the excellent papers so I shall select three, while stressing that all are of similar merit.

Ian Dunlop, an engineer with long-term high-level connections to the fossil fuel industry is not your average dyed-in-the-wool greenie. He writes, 'We are now in a period of major discontinuity, negotiating what I term *the rapids of creative destruction*, where the whole concept of growth is in question. We will emerge either with a fundamentally different sustainable world, or the system as we know it will collapse'. He builds support for this proposition around climate change. Current global policies on climate change will result in a 4°C+ rise in temperature by the end of the century and lock in an eventual sea level rise of 70 metres. He quotes reputable authorities who say that a 4°C warmer world will have exceeded the limits of human and Nature adaptation over most of the globe and such a world is one of one billion people or less, not one of seven billion.

'Despite this stark picture' he writes, 'in the 20 years

since negotiations on reducing carbon emissions commenced, virtually nothing has been done to curb them, and there are no signs of that occurring via international treaties in the short term'. Dunlop rightly says, 'It is no longer acceptable to say: 'this is the best we can do... we have to define where we are today, where the science tells us we have to get to, and then commit to that path without procrastination. Our national [population] carrying capacity is going to be severely constrained...Euphoric plans for population growth will have to be tempered by a realistic assessment of these constraints.'

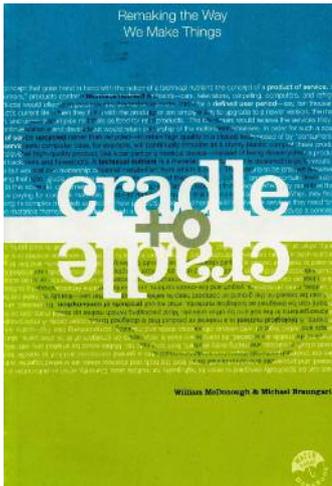
Dr Jane O'Sullivan juxtaposes the urgent need to limit population growth with the claimed need to increase population to avoid the 'dangers' of an ageing population. She examines each of the assertions (masquerading as arguments) made to support this claim of 'danger' and shows them to be both flawed and self-serving. Such assertions are frequently accompanied by the contention that it is not possible to adopt policies to limit population while simultaneously adopting policies to increase population.

The fear of ageing also rests on arbitrary statistical measures of dependency often comparing the number of those over 65 with the working age (15-65) population rather than recognising that children are often more dependent for longer than the elderly and their numbers in a population moving toward stabilisation are smaller. Using these more realistic measures of dependency shows that ageing is not a problem that cannot be easily managed.

Industrial civilisation is dependent on the exploitation of resources. Many are non-renewable and chief among them is energy which makes all the others available. Dr Simon Michaux, a mining engineer, in his paper that could have been called 'Peak Civilisation' provides compelling evidence that we are coming to the end of exploitable minerals. The grades of ore being mined are falling continuously; the energy required to extract the contained metals is rising. Ore bodies are less accessible and energy itself is subject to these same trends. Michaux analyses the trends for each of the primary sources of energy and concludes that peak fossil energy is only about three years away (2017). He concludes his paper with the claim that the general public is being kept largely ignorant of these issues, issues that we desperately need to all understand. 'We either meet these problems effectively, or those problems meet us with devastating consequences.'

A small sample of the well-argued, well-referenced papers in this book; while each deals with a specific matter, all are interrelated and must be dealt with each in the context of all the others.

Book Review



Cradle to Cradle – Remaking the way we make things

by Michael Braungart and
William McDonough

Vintage Books, 2008

*Reviewed by Haydn
Washington*

Recently I got a chance to
read a ‘classic’ – *Cradle to
Cradle* – while finishing
my forthcoming book
Demystifying

Sustainability. Cradle to Cradle is a very influential book in sustainability circles. Why a review now? The answer lies in ‘surprise’ – my surprise! Having written extensively about denial I was surprised about the denial of overpopulation that was present throughout this book. They state that those concerned about population believe that humans should stop having children (without actually quoting what such groups actually say).

Now don’t get me wrong, I think there are some great things in this book, and for me the idea of ‘cradle to cradle’ products is a no-brainer. I couldn’t agree more with their statement that ‘the misuse of material resources is not just suicidal for future human generations but catastrophic for the future of life’. Yet two pages later they state that stabilising the population is ‘like looking into the eyes of a child and saying “It would be better if you were not here”’. If society continues to ignore the impact of overpopulation, it would be more correct for us to say ‘sorry, we passed on a devastated planet because we pretended endless increase in our numbers didn’t matter’.

They display another odd argument - that calling for change in the endless growth is somehow anti-human. They note ‘If the assumption is that human beings are bad for the planet, surely the best thing is for us not to be here at all’. They then discuss the ‘guilt language’ of environmentalism. Again, I would think the rational response to human impact would be to radically reduce that impact by changing *both* overpopulation and overconsumption.

Braungart and McDonough ‘get’ overconsumption, yet sadly they don’t get overpopulation. Changing one without the other will mean we continue our path towards the abyss. The idea that endless growth on a finite planet is absurd is clearly a bridge too far for them. They state their book ‘goes beyond the environmental chorus saying that growth is wrong ...’. They say it’s not about saving the planet but ‘learning

to thrive on it’. One sees this mantra also regarding the ‘circular economy’ that grew from cradle to cradle, where the Ellen Macarthur Foundation argues this will be a ‘new engine of growth’. UNEP argues similarly for its ‘green economy’. They remain wedded to the idea of endless growth, hence why ‘sustainable development’ has failed, as it has been assumed to mean ‘sustainable growth’ – an oxymoron. However, they seem confused about what growth *is*, as on p. 78 they are mainly talking about growth in intangibles such as education and quality of life. Yet they also talk about growth in ‘prosperity’, which most commonly means the use of more resources by more people – an untenable idea ecologically when you are past ecological limits (as we are).

There is another problem with this book – ethics. They state that ‘you won’t solve problems if they are seen as ethical’. Won’t we? No serious argument is given as to why, other than ‘at some point everyone behaves badly’. Perhaps they do, and this is why *we need* to talk about ethics and change this. Indeed they seem confused about this, as they ask us what it would be like if we were ‘100 percent good’. I would argue we urgently need to talk about worldview and ethics, for if we did, we would realise what Eileen Crist calls the ‘sheer moral evil’ of the myth of endless growth (see *Life on the Brink*). How can the predicted extinction of two thirds of life by 2100 (if we continue endless growth) be seen as anything but ethically appalling?

To conclude, there are great things in this book; the idea that eco-effectiveness is better than eco-efficiency; the idea of eco-design and the rejection of planned obsolescence. Yet there is also confusion around ethics (be ‘good’ but ‘don’t talk about ethics’) and denial of the impossibility of endless growth - and a total denial of the need to tackle overpopulation. They see the problem of overconsumption but cannot see its terrible twin – overpopulation. They cannot shake the addiction to endless growth. The success of this book with business is thus explained – it allows ‘business as usual’ to continue by pretending growth can keep on forever. And that central flaw is a great shame in a book with otherwise visionary ideas.

Dr Haydn Washington is an environmental scientist and Visiting Fellow at the Institute of Environmental Studies at UNSW. He has written six books on environmental issues, the most recent being ‘Climate Change Denial: Heads in the Sand’ (2011 with John Cook), ‘Human Dependence on Nature’ (2013) and the forthcoming ‘Demystifying Sustainability’ that will be available in Australia from March. Haydn is also the co-director of CASSE Australia that promotes a steady state economy rather the current endless growth myth.

Members' Page

LETTER

Food (in)security

The page one article in the Sept 14 Newsletter is all about "Food Insecurity".

The inverse term "Food Security" has become a mainstream, reactionary phrase from the growthniks. And as such, I feel SPA should not be pandering to big business, and big bleeding-heart, debating the subject on their terms.

They say, "all we need is more technology to grow more and more food".

SPA says, "all we need is to respect the reproductive rights of the world's women".

Why not tell the truth? The Human Plague will end exactly the same way as all other animal plagues end. Exponential increase in numbers. Sudden collapse in numbers. Mass starvation.

David ZPG Hughes

St Kilda South, Vic 3182

THAT HYMN AGAIN!

Our apologies to Chaplain John Bunyan. In the September newsletter we had the wrong words to the music provided. So here are the right words, inspired by the work of Lester Brown.

ANGELA
66 65D

Fr John Bunyan
with help from
Mrs Angela Helps,
the Revd Michael Deasey
and Mr Alistair Nelson



That which Jesus lived for, -
that which Jesus died for –
common-wealth of heaven,
must be found on earth:
his God wants for sharing
sacrifice and daring,
and at every table
bread and wine and mirth.

End earth's over-crowding:
bless the young with schooling,
be the soil's salvation,
offer health to all ;
use all water wisely,
live rich lives more simply,
capture wind and sunshine,
see great Satan's fall.

By the Spirit's action -
fight all feud and faction,
offer up entirely
self and heart's concern :
die for those that follow,
so that on the morrow
seeds grow into harvests,
trees of Life return.

Putting the 'E' back in our name



More than a decade ago we changed our name from Australians for an Ecologically Sustainable Population (AESP) to Sustainable Population Australia (SPA). The former had been too much of a mouthful, at

least when answering the phone. In the intervening years, however, the word 'sustainable' has been systematically abused and included in such oxymorons as 'sustainable growth'. Some members of the public have even wondered, based on our name, if we want the population to grow or not.

And we now have the added problem of having a political party – the Sustainable Population Party – with almost the same name. Importantly, we are not allowed to be affiliated with any political party as it compromises our tax-deductibility status.

At its meeting on 25 November, the SPA national executive agreed to 'open a conversation' about restoring 'ecologically' to our name, not as AESP, but as ESPA (Ecologically Sustainable Population Australia) or just ESP (Ecologically Sustainable Population). The latter, of course, may be confused with extra-sensory perception so perhaps ESPA is the better alternative.

One committee member felt that having ecologically in our name made us focus too much on the environmental aspects of the issue when there were social and economic reasons for stabilising and lowering population. The aims and objectives of our organisation do include social and economic ones and we will continue to use those reasons in the community debate. Nevertheless, we are basically an environmental organisation and are recognised as such by the Department of the Environment and the Tax Office.

If you have a view on this, please write to the newsletter editor at editor@population.org.au or c/- SPA, PO Box 3851, Weston Creek, ACT, 2611 and we hope the letters page will be full next issue!

Jenny Goldie, national president

Population Policy

ENVIRONMENTAL GROUPS' POPULATION POLICIES (or lack of)

In the lead-up to the last federal election, SPA published the population policies of the major parties. In a similar vein we recently contacted the major national environmental groups to give them the opportunity to explain their population policies. After all, you would think that any serious environmental group would be keen to explain its policy on something as critical as population.

We contacted the Australian Conservation Foundation, Greenpeace Australia, Friends of the Earth, the Wilderness Society, and the World Wildlife Fund (Australia).

Of these five groups, only the Australian Conservation Foundation seemed to have a population policy.

The Australian Conservation Foundation and population



**AUSTRALIAN
CONSERVATION
FOUNDATION**

Australia's ballooning population and our over-consumption of natural resources is putting nature under pressure.

Rapid population growth makes it more difficult to solve every serious environmental problem we face, including climate change, water shortages, habitat loss and urban congestion.

More people means more roads, more suburban sprawl, more dams, more power lines, more energy and water use, more dredging, more pollution in our air and natural environment and more pressure on our animals, plants, rivers, reefs and bush.

All Australia's major cities are under strain from increasing population. Overuse of water, loss of natural habitat on the urban fringes, and pollution and congestion from cars and trucks are some of the most obvious impacts. The problems are particularly evident in Melbourne, Sydney and south-east Queensland.

The growth of a consumption-intensive population in Australia is damaging our environment, yet governments continue to pursue high population growth strategies – or have had no coherent demographic policy at all.

The Australian Conservation Foundation would support a national population policy to:

- Stabilise Australia's population and resource use at ecologically sustainable levels;
- Maintain healthy regional and remote communities and actively work to reduce

Indigenous disadvantage;

- Help other nations achieve population stabilisation and ecologically sustainable lifestyles through non-coercive, holistic development programs; and
- Encourage migration policy that fulfils environmental, social and ethical obligations, rather than perceived economic needs.

Australia's big employer lobby groups continually recite a mantra about 'skills shortages' and call on the government to increase skilled migration. But how much is 'skills shortage' code for 'lower wages'?

ACF is pro-refugee, pro-migrant and strongly supportive of a vibrant multicultural society. To look after our environment we should stabilise Australia's population at an ecologically sustainable level and we can do that in a way that accommodates refugees and family reunions.

Demographic studies show if net inward migration is about 70,000 a year or less, the population will stabilise in about the 2050s. That means it's possible to return Australia's overall migration to 1990s levels by increasing humanitarian migration and continuing to support family reunions, while substantially reducing skilled migration.

If Australian governments pursue and promote policies that stabilise our population and consumption levels, we can transform our economy and restore our country's precious biodiversity.

Special appeal

Please help get population into the "7th International Conference on Climate Change: Impacts and Responses".

Jane O'Sullivan has the opportunity to present a paper at the conference in Vancouver, Canada, 10-11 April 2015. The paper, titled "**Synergy between population policy, climate adaptation and mitigation**" has been accepted by the conference. Jane is collaborating with Madeline Weld, president of the Population Institute Canada, to co-author the paper that will be submitted to the *International Journal of Climate Change: Impacts and Responses*.

This is a great opportunity to strengthen our international collaborations, and to present the case for a greater effort on population stabilisation in the climate-change discourse.

However, to enable Jane to attend the conference we need to raise \$2,000 by 31 January. To donate, please phone SPA on (02) 6288 6810 and mention the climate-change appeal. (Note that the SPA office will be closed from 23 December to 5 January inclusive.)



BRANCH REPORTS

NSW: The public meeting *How Big for Sydney?* attracted some coverage from ABC News but unfortunately the report suggested it was a meeting to discuss how the city should grow rather than whether it should continue to grow. The question time was lively with many people expressing frustration with our inability to get serious debate about the issue. A very big thank you goes to Nola Stewart for an excellent job catering for the event.

The branch will be holding its AGM and Christmas party on December 10, 6.30pm at Sydney Mechanics' School of Arts. The meeting (about 30 min) will be followed by a screening of *Surviving Earth* and then drinks and nibbles. Anyone interested in standing for an office-bearing position or the committee is invited to contact the branch before December 9. Proxy forms are available on request. The meeting, film and party are open to non SPA members.

Thanks to the current committee for all their efforts and support through the year. *Kris Spike*

QLD: The Queensland Branch held its AGM on 17 November. The committee for 2014-15 comprises Jane O'Sullivan (President), Jan McNicol (Secretary), Tony Matta (Treasurer) and John Roles (Member). David Robertson retired from the committee, and was warmly thanked for all his efforts over the past four years.

The branch has held successful stalls at the Rosewood Festival, the Australian Climate Action Summit and the Mary River Festival. Jane O'Sullivan's talk at the Climate Action Summit was very well received. We are continuing discussions with Children by Choice, in the hope of establishing novel ways to reduced unintended pregnancies in Australia and to access greater funding for family planning generally. Members of the branch are also working on improvements to the SPA web site, and would welcome suggestions from any members by email to qld@population.org.au. *Jane O'Sullivan*

WA: The SPAWA Committee has joined with 42 other organisations in the 'Places we Love' Alliance to lend support to the Australian Conservation Foundation's campaigns to defend nature and hold governments accountable for the value of the places we love. A number of individual committee members have also joined in this worthwhile campaign by ACF. Their website is at <http://www.placesyoulove.org/>.

WA Branch on 25 November agreed to become signatories to a WACOSS & Shelter WA letter to Minister Andrews re funding for homelessness (www.shelterwa.org.au). This letter is being supported by a host of kindred organisations across Western Australia concerning the National Partnership agreement on Homelessness. The letter raises our

concerns about the uncertainty of future homelessness funding under the NPAH and the lack of information relating to this issue.

Emeritus Professor Harry Recher presented the 2014 Keith Roby Memorial lecture 'Failure of Science, Death of Nature' on October 21 and participants weren't disappointed. Prof. Recher was the first Professor of Environmental Studies at Edith Cowan University. Then he was so interesting and challenging that it was common to find many students skipping lectures at their own Universities to do so. This year, Professor Recher argued that Australians have lost contact with nature and do not understand the dependence of human civilisation on global ecosystems. Feedback suggested it was well attended and equally well received (<http://events.murdoch.edu.au/id/1971/>).

Our letter writers have been busy but unfortunately, only a few were successful in getting their efforts published. Most notable of these were efforts by Clive Huxtable and the prolific, Brad Capes.

The committee elected at the August AGM were as follows: Harry Cohen President; Paddy Weaver Vice President; Noni Atkinson Secretary; John Weaver Treasurer; Committee: Greg Brennen, Judith Osgaard, Andre Day, Robin Collin. *John Weaver*

ACT: On 12 October the ACT branch occupied one of the 85 stalls at the fourth annual Living Green Festival. The festival showcased vegan food outlets and sustainable living technologies. Political activism was represented by Sea Shepherd, Amnesty International and SPP. Nearly 5000 attended the festival and took away nearly all that was on offer at the SPA stall including about 200 copies of the past four newsletters. There was general sympathy for SPA's aims but there were some who thought we were fighting a lost cause.

On 19 November Jenny Goldie addressed the ANU Emeritus Faculty on "The Need for Degrowth of Population". The room was gratifyingly full and late comers had to sit in the corridor. As is to be expected, members of the audience were mostly retirees but there were also a few post-graduate students who actually took notes.

Local members are invited to the Christmas party at Nick and Jenny Goldie's in Michelago at lunchtime on Saturday 6 December. Please contact Nick Ware for details nick.ware@homemail.com.au.

Members are also encouraged to attend the premiere of the documentary *Surviving Earth* on Monday, 8 December. Doors open 6.30pm for a 7pm screening followed by a panel discussion from 9pm. Tickets: \$12 and \$10 student/conc. Book online or buy at the door.

Mick Thompson

SA: (See box this page for main report.) In other news from South Australia, the convenor of the state-registered political party Stop Population Growth Now (SPGN), Mr Bob Couch, is currently a candidate in the by-election for the state seat of Fisher. SPCN's many message-bearing corflutes (election posters) from the SA state election last March have been re-purposed for Bob's election campaign and are surely stimulating population-based discussions all over southern Adelaide. You can view these corflutes and read Bob's campaign letter by visiting SPCN's website: <http://stoppopulationgrowthnow.com/> *Michael Lardelli*

VIC/TAS: Victoria's population booms whilst Tasmania is largely spared. Melbourne has an apartment building "boom" in the CBD, articles about unhappy residents facing the transformation of their streets and suburbs into much higher density living appear almost daily in the print media. A recent photograph of a triumphant looking Victorian Premier Napthine illustrated an article about the booming population with an increase of 400,000 or 2000 per week since 2010. Another news item was about Victoria and Tasmania being the two worst performing states economically.

Local planning activist, Mary Drost organised a public debate on 13 October between MP Hon. Kelvin Thomson and Melbourne's Lord Mayor, Cr. Robert Doyle on whether Melbourne will still be livable with a large population, Mr. Thomson taking the "no" case and Cr. Doyle arguing the "yes" case. There was no official winner but the audience was very supportive of the "no" case. Of course, we all thought they were the better arguments so the unofficial but clear winner was Hon. Kelvin Thomson. President of the branch, Sheila Newman filmed the event and conducted and filmed interviews with audience members as they left.

Sheila Newman and branch committee member Jill Quirk spoke at Freedom Summits on 16 November to a diverse audience at Trades Hall Melbourne on the signs and symptoms of population growth that are causing political and ecological problems in Australia. They also addressed the movements that are trying to change these things and on the power of the "growth lobby".

Jill Quirk

In sympathy

As well as Tony McMichael, we note with sadness the passing of Susan, the wife of Professor Colin Butler; Judith, the wife of our generous donor Prof Ian Clark; and Heather Southcott of the SA branch who was, for many years through the 1980s and 1990s, the President of the Australian Democrats.

SPA NATIONAL AGM AND SYMPOSIUM

Adelaide, 7 March 2015

The SA committee is preparing for the next national SPA Annual General Meeting to be held in Adelaide on Saturday, 7 March 2015. We will hold the AGM a little earlier than usual to allow people to combine a trip to the AGM with a visit to Adelaide during our "Mad March" festival season. The concurrent festivals are:

- **Adelaide Festival** – 27 February to 15 March (<http://www.adelaidefestival.com.au/>) This includes, among other things, Adelaide Writers Week from 28 February to 5 March.
- **Adelaide Fringe** – 13 February to 15 March (<http://www.adelaidefestival.com.au/>) and especially:
- **WOMAdelaide** – 6 to 9 March (<http://www.womadelaide.com.au/>)

On the afternoon after the AGM we will hold a symposium, "**Population and Ageing: Disaster or Triumph?**" Confirmed speakers for the symposium are:

Sociologist Assoc. Prof. Katharine Betts who has analysed the consequences for Australia's tax base and workforce of an ageing population

Epidemiologist Prof. Garry Egger AM MPH who is an expert on public health and will address health issues of an ageing population

Economist Assoc. Prof. Philip Lawn who is an expert on ecological economics and alternatives to the impossible dream of eternal economic growth

Agronomist Dr Jane O'Sullivan who has very interesting observations on the infrastructure costs of population growth, population age structures and the effectiveness of family planning strategies in stabilising populations.

We have called for South Australian members to offer billets to interstate SPA visitors for the AGM. However, if people want to attend the AGM but stay in hotel accommodation then they should book their accommodation soon to avoid disappointment! Flights to Adelaide should be booked early too.

Michael Lardelli



NEW SUPPORTER CATEGORY

At its meeting on 25 November, the national executive agreed to introduce a new category of 'Supporters', as distinct from 'Members'.

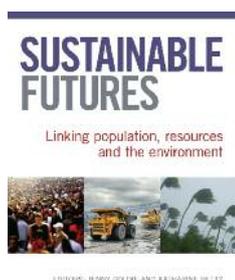
Supporters will receive enews and the newsletter electronically but not have the members' rights to vote, to receive the newsletter in hard copy, or to participate in PopForum. Supporters can apply through the website and will be asked for contact details such as name, address and email but they will not be charged fees.

We hope by adding to our email base in this way we will have more political leverage and also have greater capacity to disseminate information.

We also hope as many members as possible will stay as members to help financially underpin the organisation. Nevertheless, if there is financial hardship, being a supporter is better than not being a member at all, and you are still contributing to the cause!

Jenny Goldie, National president

Sustainable Futures



Sustainable Futures explores the links between population growth, diminishing resources and environmental challenges, and the implications for Australia's future. Written by leaders in their field, and based on presentations from the 2013 Fenner Conference on 'Population, Resources and Climate

Change', this book is a timely insight into the intertwined challenges that we currently face, and what can be done to ensure a sustainable and viable future.

The book identifies the major areas of concern for Australia's future, including environmental, social and economic implications of population growth; mineral and natural resources; food, land and water issues; climate change; and the obstacles and opportunities for action.

Accessible, informative and authoritative, Sustainable Futures will be of interest to policy makers, students and professionals in the fields of sustainability and population growth.



Available as an eBook upon publication. Visit our website for more information:
www.publish.csiro.au/eBooks

DISCLAIMER

While every effort has been taken to ensure the reliability of the information contained in this newsletter, the opinions expressed are those of the various authors and do not necessarily reflect the opinion of either SPA or the editor.

ABOUT SPA

Formerly Australians for an Ecologically Sustainable Population.

From June 2014 the SPA Newsletter will be mailed quarterly to members of Sustainable Population Australia Inc. For further information, please contact the SPA Office or your nearest branch. All membership applications and renewals should be sent to the National Office. Newsletter contributions should be sent directly to the editor.

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