STEP Matters

Number 155, June 2010

In this issue

We update members on matters of local interest and report on:

- STEP Track and Trail Policy. STEP proposes a robust framework to be used when assessing the impacts of proposed new bushland tracks and trails. See details below.
- Tourism in National Parks. We look at the latest State Government moves to earn a fistful of tourism dollars at the expense of reduced levels of National Park protection.
- The proposed M2 upgrade. John Burke explains why it will ultimately only act to increase road congestion.
- The value of our threatened bushland. Your editor looks at the importance of bushland in maintaining biodiversity and the role local government should be playing to protect it.
- We need a new economic model. Ross Gittins explains why we need a new framework which has the economy as a subset of the environment, not vice versa.
- The English landscape. John Martyn visits an English nature reserve whose "natural habitat" is largely man-made and speculates on the consequences for English biodiversity.
- We are in competition with our car for food. Lester Brown explains why using cropland to produce fuel for cars threatens world food security.
- Populate and perish. Gordon Limburg offers a personal view on the population debate.
- Nuisance birds. Tim Gastineau-Hills brings a new disco solution to an old problem: what to do about the cockatoo?
- Plus the usual information about upcoming events, STEP walks, and general environmental news.

Public Meeting - STEP Bushland Track & Trail Policy and Q&A – 10 August 2010

8.00pm – St. Andrews Church Hall, corner Chisholm and Vernon Streets, Turramurra.

STEP members would be aware that we support the construction of properly designed and professionally constructed tracks and trails in certain bushland areas. These are generally to be located in what is regarded as degraded and non sensitive urban bushland. We are however concerned at the environmental damage that thoughtlessly designed tracks and trails in more sensitive areas can and do cause.

STEP has therefore had a subcommittee working on producing a policy and reference paper specifically addressing the issue of track and trail building in bushland. This work arose out of our concern that, given the pressures arising from a growing urban population, the demand for recreational access to bushland was leading to long-term damage to the immediate bushland and to a loss of biodiversity across the region.

STEP is concerned at the absence of an accepted robust framework for local authorities and others to use to make sound environmental judgements when they are assessing the likely impacts of new trails and tracks. This evening will see the public release of the new STEP policy, to be followed by a Q&A forum with representatives from a variety of interested groups.

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Key Issues and Updates

St Ives Showground and Precinct Lands Options – next steps

Ku-ring-gai Council (KMC) placed a draft options paper for this area on public exhibition earlier this year. STEP included the following points in its submission to KMC:

- The need to protect in perpetuity the endangered ecological community known as Duffys Forest.
- The removal of the Mini Wheels motor-cycle club from its present site. It is clear that is quite inappropriate to have such an operation located in such an environ-mentally sensitive site.
- The proposal to retain the Wildflower Garden in its current location.

In June a report was released to go to Council for consideration. This report (plus attach-ments) can be found as GB Item No 12 at http://www.kmc.nsw.gov.au/www/html/103-view-council-meeting.asp?numPageNo=2&numTypeID=2&numResID=1344&numYearNo=2010.

The June report is still to be studied in depth by STEP. However, on the face of it, the report seems to contain both positives and negatives. The report unfortunately recommends a departure from the exhibited plan by retaining the Ku-ring-gai Mini Wheels Training Club at its current location, despite recognising the widespread environmental damage being done at the present site. Indeed on this issue the report specifically notes the need "to carry out associated environmental management works to regenerate the Duffys Forest vegetation community".

On the positive side, the report does recommend the provision of physical protection for the Duffys Forest Ecological Community and other existing natural vegetation on the St Ives Showground lands, from encroachment, vehicles and compaction, nutrients, weeds and rubbish. Noting again however the exception of the "Ku-ring-gai Mini-Wheels Training Club (KMWTC) area which has been damaged over a long period of time. A separate plan will be devised to guide use in the KMWTC area".

Should this report be adopted by Council, community and stakeholders will again be invited to contribute to the Draft Plan of Management for the St Ives Showground and Precinct. STEP will review the report and will monitor its progress in KMC. STEP also welcomes any comments from its members on this issue.

Bushland Track and Trail Policy

The release of the STEP Bushland Track and Trail Policy (see page 1) is aimed at providing a scientific fact based framework for the use of local authorities and other interested parties in the assessment of potential routes through bushland areas. STEP is anxious to foster a proper public debate on this matter, which has perhaps for too long been the domain of vested interests, both on the conservation and recreational user sides! The STEP Policy has been developed by a sub committee which includes the well known bush restoration author and academic Robin Buchanan, assisted by Frances Scarano and Barry Tomkinson.

Lane Cove National Park (LCNP) - Plan of Management

As reported in the last edition of STEP Matters, each National Park must have a Plan of Management (PoM) and these plans have to be updated at regular intervals. These plans are prepared in accordance with the National Parks and Wildlife Act, and once approved, become the legally enforceable policies for the management of LCNP. The last PoM for LCNP was completed in 1998. Since then the Park has nearly doubled in size to about 700 hectares, mainly due to the Pennant Hills Park and Thornleigh Park additions.

STEP recently met for the first time with Gary Dunnett, the newly appointed manager for the Metro North East Region, to review progress of the PoM. Also present was Area Manager Steve Atkins. The recent restructuring of the National Parks and Wildlife Service (NPWS)

has delayed the current revision to the Lane Cove PoM and it is now only expected to be finalised by year's end. STEP used the opportunity to raise a number of key planning issues, including:

- *Funding*. When Pennant Hills Park and Thornleigh Park were added to the LCNP several years ago, they came with a commitment from the State Government for additional recurrent funding of $600,000 per annum. STEP continues to be concerned that, despite assurances to the contrary, this level of funding does not seem to be evident in the works budget for much needed restoration and maintenance work in the additional lands.
- *Track and trail policy*. There is increasing evidence of significant damage to the park from illegal trails built by thoughtless or ignorant bike riders, particularly in the Pennant Hills area. This is a shared concern with NPWS and STEP committed to work with them to establish a robust policy which would allow legitimate cycling but curtail damaging illegal trails. (LCNP already has approximately 40 kilometres of service trails made available for cycling.)
- *Control of nutrients into bushland*. It is well understood from scientific studies that nutrients, primarily phosphorus, degrade Hawkesbury Sandstone bushland by creating conditions that favour exotic weeds at the expense of local flora. Phosphorus builds up in ecosystems over time and hence has a cumulative effect. In these circumstances it seems sensible, even essential, that those charged with the management of our bushland heed these factors and strive to prevent water-borne nutrients from entering bushland. STEP does not believe that current management devices (primarily bioretention swales) are effective as long-term solutions and as such we continue to raise this issue with NPWS and also with local councils.

Tracing urban resistance – mobilising the environment

STEP has accepted an invitation from the Department of the Environment and Geography at Macquarie University to participate in a research project which seeks to explore issues around residential devolvement, environmental conservation and community resistance in the Ku-ring-gai area.

The project explores the ways in which community/environment and other groups operate in the face of state planning and private sector development.

The results of the project will be made available to STEP members.

Reminder – Barry O'Farrell to address STEP

STEP members are reminded that Barry O'Farrell, Leader of the Opposition in New South Wales, has accepted our invitation to address the next STEP AGM on 12 October 2010 on the topic, *"The Politics of Population in Australia and its impact on meaningful Climate Change Action".*

Tourism in National Parks

The NSW Government and Coalition Parties joined together this month to pass the National Parks and Wildlife Amendment (Visitors and Tourists) Bill 2010. The Government sought to change the existing Act to make it easier to build private tourism developments in National Parks. Environment NGOs have been negotiating for some time with the Environment Minister, the Hon Frank Sartor, to secure changes to ensure that current levels of park protection were not weakened. In the end, they were out-negotiated by the Minister and the flawed legislation went forward with the support of the Coalition.

Despite some frantic last minute lobbying by many conservation groups (including STEP) and other parties, the legislation was rammed through Parliament late at night. All amendments moved by the Greens, including one supported by the Coalition, were defeated with the support of the Shooters Party and Fred Nile. Senior legal advice secured by environment groups confirms that the changes will be "revolutionary" and will remove National Park protection in three ways:

- Removes the prohibition on exclusive private use of National Parks;
- Allows leases to be granted for purposes that are not tied to the nature conservation purpose of National Parks; and
- Gives more power to the Minister as the issue of leases and licences may not be reviewed by the Courts.

While the rationale for the Bill is to increase the income from national parks, the Minister has conceded that it will not in fact "materially increase" the resources available.

So not even forty pieces of silver?

The M 2 Upgrade – déjà vu all over again

STEP Vice President John Burke reviews the likely outcomes of the proposed M2 upgrade

After ten years of operation the M2 toll-way has become so congested in peak periods that it is to be widened. I suppose we could, and should, say that we told them that would happen. Improved roads change demographic behaviour and attract additional vehicles onto them until congestion again occurs. Of course this proposed widening will again prove futile and congestion will soon, yet again, become the limiting factor.

Of course, with both the M2 and the struggling Lane Cove Tunnel now being owned by Transurban it is hard not to believe that one key purpose of the upgrade is to deliver more vehicles to the tunnel. In addition, the short-term congestion relief will please some drivers and deliver short-term political gains for whatever government is in power.

It is probably futile to suggest that something other than short-term gratification is appropriate but that seems to be STEP's role so we shall soldier-on in that vein. Let us not, however, give the impression that short-term gratification is always inappropriate. When we buy that nice cup of coffee or indulge in a Mars Bar the result can be excellent. However, when we buy a house or some other asset we always look for it to serve our needs for an extended period of time. Sadly our governments are stuck in Mars Bar world.

So, faced with congestion on the M2, what should the NSW government have done? There are a number of essential actions. The obvious short-term solution is to provide adequate public transport for the people using the toll-way. A northwest rail link is one such project. Of course that would take toll-paying commuters off the toll-way, produce a huge fuss from Transurban and perhaps trigger penalty clauses in the contract between the toll road owner and the government. Therein lays a good argument for such assets to be in public rather than private hands.

A longer-term essential action is to have a proper plan for Sydney over the next century or so. Such a plan would limit the population of Greater Sydney. At a rate of growth of 1.4%pa Sydney would have 18 million people in another 100 years. That would be madness but most of us, our leaders included, seem to think that madness is OK - Australia's current growth rate is about 2%. Such a plan should take into account the fact that infinite growth is impossible in a finite world. The imperatives arising from peak oil and global warming mean that our behaviour must

change over the coming decades. Cheap oil will dry up and use of the temporarily abundant coal reserves will need to be curtailed.

Wouldn't it be great if there were just a little vision? Wouldn't it be wonderful if Kristina or Barry would recognise the problems we are creating for future generations? In the meantime, however, we will get an extra two lanes of congestion on the M2 and vision that looks about as far ahead as the next election. We shall also lose another 10 hectares of urban bushland. But that's not much is it? We have plenty, do we not? Trouble is that these little decisions are constant and are robbing us of our environment bit by bit. Imagine Sydney with 18 million people – high-rise from Bondi to Penrith interspersed with bits of mown park.

We can be delighted, however, that Transurban will be happy and that the government can tell us that this is good planning. It's depressing – time for a Mars Bar.

Note: You can read all about it at: http://www.hillsm2upgrade.com.au/

Biodiversity, our bushland and a healthy community

Barry Tomkinson looks at why whittling away at our remaining urban bushland is not a good idea.

> *"You see the great eucalypt forest; its trees are 300 feet high and they are still there. But they can only exist with the partnership of a humble fungus. It plays a vital role for the eucalypt because it unlocks nutrients underground that allow the tree to grow to a huge size in poor soil. And what spreads it? A tiny rat kangaroo that is now highly endangered all round Australia. Why should we worry? Because everything is interrelated."* (Tim Flannery, former Australian of the Year. [1])

The United Nations Convention on Biological Diversity defines biodiversity as the "… variability among living organisms". This biodiversity is an increasingly scarce resource, and is becoming much more so as we continue to destroy, at ever increasing rates, our remaining natural habitat. As life forms disappear, they individually and collectively alter the earth's ecosystems and reduce its biodiversity. Each such disappearance diminishes the services provided by nature, such as seed dispersal, pollination, clean water, soil production and protection, salinity and pest controls.

Geological records show that there have been five previous mass extinctions since life began on Earth. Today we are in the early stages of the sixth great extinction [2]. Unlike the five earlier ones which were caused by natural phenomena, this one is of human origin, being substantially caused by environmental degradation. Yet we have only relatively recently begun to recognise the real importance of our biodiversity. As human beings we are entirely dependent for our sustenance, health, well-being and enjoyment of life on our fundamental biological systems and processes. We in fact derive all of our food and many medicines and industrial products from the remaining wild and domesticated components of our biological diversity, quite apart from the recreational, social and cultural services which it provides [3].

This is a global issue that is well represented in Australia. The former Australian of the Year, Professor Tim Flannery, has recently said that the Australian continent is in the grip of a "biodiversity crisis". The CSIRO has classified some 52% of the continent as degraded in one way or another and in need of reclamation [3]. Flannery is backed up by University of NSW researchers, who report that Australia has the worst extinction record in the world in relation to small mammals – Australia alone accounts for 50% of the world's extinct mammals [4].

If our biodiversity is in crisis, this means that our future is in crisis too. Species of all kinds are threatened by habitat destruction, from the loss of tropical rainforest in the Amazon to the destruction of local bushland in the Sydney region. As human population expands (or as the human population grows), the number of species with which we share the planet shrinks. There is no way that we can separate our fate from that of all life on earth. According to the research of the IUCN Species Survival Commission, "the more the rich bio-diversity of life on our planet is impoverished, the more we are all threatened. [7].

A prime cause of the crisis is the stress that population growth imposes on the natural environment. The Australian Conservation Foundation (ACF) has recently nominated human population growth as a "threatening process" under the Federal Environmental

Protection and Biodiversity Conservation Act [5]. This means that the Federal Environmental Department will be required to review the link between the growing population of Australia and the destruction of key environmental areas. This will put a focus on the pressures which the natural environment faces from the expansion of urban and industrial development, driven by a growing population. Habitat destruction is one known outcome of population growth and is also a major cause of biodiversity loss in Australia. Approximately 50% of all native vegetation has already been cleared or significantly altered, according to the ACF. Such habitat destruction is a key threat to the bushland in Ku-ring-gai and Hornsby. In addition, the ever increasing demands of recreational users for unrestricted access to the bushland for a wide variety of purposes poses significant risks, as many of these uses are known to have damaging effects on the natural environment of the bushland.

Local councils claim, with some justification, to be hamstrung in their efforts to limit State Government edicted population growth in their local areas. There is however no such excuse with regard to the protection of their local natural habitat. They are in fact specifically required and empowered to protect their local natural habitat. Under SEPP No 19 – "Bushland in Urban Areas" – they are required by law to generally protect and preserve bushland within urban areas [6]. Their response however has perhaps been more theoretical, than practically effective.

In 2006, Hornsby Shire Council adopted a *Biodiversity Conservation Strategy* [8]. The document includes the following key points:

- "We all depend upon biodiversity for our survival. It is the basis and quality of life."
- "Conservation of biodiversity is a fundamental principle of ecologically sustainable development. Its loss is recognised as the most important environmental problem in Australia."

Ku-ring-gai Council has a very similar *Biodiversity Strategy* [9], the purpose of which "... is to provide a strategic framework for the management and conservation of local biodiversity in natural and urbanised landscapes at the local level and where relevant in the regional context". It notes in particular that the majority of threats are directly or indirectly caused by human activities associated with urbanisation. Some of the key threats identified include:

- encroachment and illegal clearing;
- unauthorised activities such as bike track building;
- fragmentation of ecosystems and loss of habitat; and
- increased recreation pressures.

Implementation is however the key to any successful biodiversity strategy. It is not clear that either Council has consistently acted on to the threats identified and the objectives laid out in their respective Biodiversity Strategies. Short term pressures are the enemy of long term strategies. Councils routinely come up against vocal and well organised pressure groups who may want to pursue objectives that place at risk the biodiversity of the community as a whole. While expediency may dictate that it is easier to give in to such pressure, over the longer term the inevitable result is that it is the natural habitat, and hence the community, that is the loser.

Valuable natural and social resources are often alienated tiny-bit by tiny-bit, by the tyranny of small decisions. The trouble is that when one compromises on bushland use, a scout hall here, a picnic area and bike track there, that bushland is usually lost forever. As Sydney rushes towards 6 million people there will continue to be a never-ending list of small compromises being demanded. It will eventually all disappear unless we recognise this is erosion of our biodiversity – and we decide to do something about it.

1. Sydney Morning Herald: 9 October 2009
2. Earth Policy Institute. Lester R Brown "*Eco-economy: Building an Economy for the Earth"*
3. "Biodiversity and its value" Australian Government Department of the Environment, Water, Heritage and the Arts. Biodiversity series, Paper no.1.
4. Sustainability Magazine August 2009.
5. Sydney Morning Herald 23 March 2010
6. State Environmental Planning Policy No 19 – Bushland in Urban Areas (NSW)
7. Species Survival Commission, 2000 *IUCN Red List of Threatened Species* (Gland, Switzerland, and Cambridge, UK: World Conservation Union-IUCN, 2000
8. See: http://www.hornsby.nsw.gov.au/uploads/documents/BSC_web1.pdf
9. See: http://www.hornsby.nsw.gov.au/uploads/documents/BSC_web1.pdf

Maxing out our green credit card – why we need a new economic model

Article by Ross Gittins, Economics Editor, Sydney Morning Herald, 19 May 2010

"… the budget continues our practice of worrying intensely about what we're doing to the economy while ignoring what we're doing to the environment."

The most thought-provoking comment I've seen on the budget came from Senator Christine Milne of the Greens. "Every Australian knows," she said, "that if you have two credit cards, it is very bad management to pay off your debt on one of them by racking it up on the other". The budget "pulled down the national economic debt, but it continued the process of racking up our ecological debt".

Sadly, it's true. The budget formally records Kevin Rudd's failure of leadership with his cowardly and illogical decision to shelve his emissions trading scheme. It shows he took steps to avoid being accused of using the abandonment of the scheme to hasten the budget's return to surplus by using the net cash saving involved – $653 million – to increase spending on renewable energy. The reversal did make it possible for the Government to meet its commitment to limit the real growth in its spending to 2 per cent a year.

And it did mean it was abandoning a "great big new tax on everything" in favour of a great big new tax on the mining companies, with the proceeds to be used to buy votes with a range of tax cuts and concessions – surely a net political gain. Even so, if the government wants to insist it was motivated more by lack of political courage than by budgetary expediency, I accept its protestation.

No, that's not the point. It's that the budget continues our practice of worrying intensely about what we're doing to the economy while ignoring what we're doing to the environment. We just took a decision to take our chances on global warming – to do nothing to prepare for global action on climate change and nothing to set an example others might follow – but nowhere does that show up as a cost or liability.

It's not in the budget, nor in gross domestic product. It's invisible. We carefully measure and hugely publicise any increase in government debt or setback in economic growth, but what our actions and inactions are doing to the environment is largely out of sight. When we run down our non-renewable resources (as we're hoping to do at a much faster rate with the return of the resources boom), nowhere does this show up as a cost or reduction of our assets.

When we continue to deplete renewable resources at a rate much faster than they can renew themselves, nowhere does this show up as any kind of negative. When we continue pumping our waste back into the environment – including greenhouse gases, but also other air and water pollution, garbage and human waste – at a faster rate than it can absorb, nowhere is this recorded as a cost.

GDP, our great de facto measure of progress, counts the short-term benefits from all this exploitation, but ignores its long-term costs. So Milne is right: we have been paying off our economic credit card by racking up debt on our environmental credit card.

But as the still-unfolding global financial crisis reminds us, you can get away with racking up debt only for so long. And with the environment the day of reckoning has already started to dawn. Lift your head from the economic statistics and you see rising average temperatures, the clearing of native forests, the destruction of habitat, the decline in fish stocks, the damage we've done to the Murray-Darling and other river systems and the degrading of our soil.

So far we've managed to keep the economy separate from the environment, but we won't get away with that much longer. Why not? Because, in the words of a former US senator, "the economy is a wholly owned subsidiary of the environment". The economy exists within the natural environment and is dependent on it. Logically, you could have the natural world without an economy – that is, without human activity – but you couldn't have an economy without a natural world.

We can go for a period running our economy at the expense of the environment – plundering its natural resources on one hand, pumping out our waste on the other – but eventually we start to get feedback. The despoiled and depleted ecosystem begins to malfunction, with serious consequences for the continued functioning of our economy. We get

a lot more extreme (and thus expensive) weather events, a rising sea level forces us to move back from the coast, we start running out of native forests and some mineral resources and fossil fuels (making energy and fertiliser a lot dearer), we see the destruction of international tourist attractions such as the Great Barrier Reef, we have to move agriculture north to where the rain is, but the elimination of fish stocks and degradation of soil makes food production a lot harder and more expensive the world over.

How did we get into the mindset that allowed us to take the environment for granted? Well, mainly it's because economic activity is simply more visible than the environment. And because, until relatively recently, we could plunder the natural world with impunity. But also because we're wedded to a way of thinking about (and measuring) the economy that, because it has changed little in the past 150 years, simply ignores the environment. Because at the time global economic activity was so small relative to the huge natural world, it made sense for the early economists to treat the environment as a "free good" – something so plentiful it comes without cost. But with the human population having more than trebled since 1927 and the global standard of living also having risen considerably, it's no longer sensible to treat the environment as an "externality".

We need a new economic model – and a new way of measuring progress – that recognises the centrality of the environment to our well-being and keeps recording and reminding us when we charge things up on our environmental credit card, as Rudd has just done.

The English landscape and nature reserves

Article by STEP Committee member John Martyn who has recently returned from a visit to the UK, where he visited Lorton Meadows nature reserve in Dorset.

Most readers will be aware that the English landscape is largely "man-made" or at least man-modified. "Natural" assemblages of flora and fauna are confined to remote highland areas or the tops of sea cliffs, and even these may be periodically grazed by sheep, cattle, even horses. So an "open day" at Lorton Meadows Nature Reserve near my in-laws' home at Weymouth, Dorset, was quite a different experience than say a visit to Muogamarra or Dalrymple-Hay Nature Reserves here. This is because Lorton Meadows was originally farmland – had been for centuries – and cattle grazing continues to be part of the management plan today.

Lorton Meadows (www.dorsetwildlifetrust.org.uk/lorton meadows reserve) is one of many parcels of land purchased for conservation by *Dorset Wildlife Trust*, an organisation with some similarities to *Australian Bush Heritage*. Lorton consists of 34 ha. of grassy meadows and patches of dense woodland, and borders a coastal wetland, a housing estate, a railway line and a newly-built trunk road. On a warm May day it is a pleasant place to be, its grassland sprinkled with cowslips, buttercups and occasional early purple orchids; and its woodland ornamented with bluebells, but our walk of less than a mile took us across five or six barbwire fences: these are essential to manage cattle grazing. Other tricky management issues include woody shrub and bramble invasion. By odd coincidence, wild sloe-plum, or blackthorn, is as invasive of pasture there as its namesake (aka *Bursaria spinosa*) is in Cumberland Plain Woodland.

Lorton Meadows

Grazing by domestic stock has been so much a feature of the English landscape for millennia that it is considered an element of natural ecosystems, a largely alien concept in our part of the world. But the recent gradual removal of essential elements of the traditional rural systems – such as hedgerows lost to broad acre farming, and the overgrazing of meadowland wildflowers – has caused great concern, because biodiversity in UK continues to fall. Loss of meadowland flowers is now being cited as a contributing factor towards the crash in the honey bee population in UK.

Agriculture has an iron grip on much of the rural landscape and in many respects could be seen to be sowing the seeds of its ultimate decline.

The badger cull

With lifestyle similar to the wombat, badgers are among the best loved of English wild animals, though most Brits have never seen one in the wild as the animals are nocturnal and spend the day in their burrows or "setts". Unfortunately for them they carry *bovine tuberculosis*. On UK radio and TV farming programs one is exposed to heart-rending stories of losses of valuable dairy cattle, including calves. The issue has been studied and debated for decades and finally a badly infected section of Welsh countryside is to be subjected to a highly controversial badger cull. There is science both for and against. It is logical that if there were no wild badger vectors the disease could be controlled and eliminated in cattle. But badgers are social animals and it is also argued that the ones that escape the cull will travel far afield seeking new companions, and will spread the disease into uninfected countryside.

Climate change

Global warming is less topical in the UK these days after their coldest winter for more than 30 years, but like most people everywhere the Brits confuse "climate" and "weather". The supporting data continues to flow in. A woman in Kent has kept a log of spring bud burst in her local ash trees for more than 50 years. It happens five weeks earlier now than when she started. Much else is mainly anecdotal, but observations of the earlier arrivals of migrant birds and butterflies are becoming increasingly supportive of climate change. Little egrets and cattle egrets were once the stuff of African wildlife safari TV programmes: now they are commonly seen in southern Britain.

The English garden

Finally, on a positive note, the English love their gardens, and the focus has really been on recently with the annual Chelsea Flower Show (actually, the Aussie entry took out a gold medal!). But there is a serious side – the richness of plant biodiversity in the average garden usually exceeds that of the over-farmed countryside (nowadays it even includes wattles, grevilleas, fan flowers, bottlebrushes and eucalypts). British gardens are havens for birds, and Sydneysiders with gardens overrun by parrots, currawongs and mynahs may look in envy on the array of finches, robins, blackbirds, thrushes, tits and other small songbirds that fly in daily to bird feeders and food scraps. The flower garden may also ultimately prove the salvation of the honey bee.

View from the USA: Competing with your car… for food

Article by Lester R Brown, Earth Policy Institute, Washington

"The grain required to fill your car's 95 litre tank with ethanol just once will feed one person for a whole year"

At a time when excessive pressures on the Earth's land and water resources are of growing concern, there is a massive new demand emerging for cropland to produce fuel for cars – one that threatens world food security. Although this situation had been developing for a few decades, it was not until Hurricane Katrina in 2005, when oil prices jumped above $60 a barrel and US gasoline prices climbed to $3 a gallon that the situation came into focus. Suddenly investments in US corn-based ethanol distilleries became hugely profitable, unleashing an investment frenzy that will convert one fourth of the 2009 US grain harvest into fuel for cars.

The United States quickly came to dominate the crop-based production of fuel for cars. In 2005, it eclipsed Brazil, formerly the world's leading ethanol producer. In Europe, where the emphasis is on producing biodiesel, mostly from rapeseed, some 2.4 billion gallons were produced in 2009. To meet its biodiesel goal, the European Union, under cropland constraints, is increasingly turning to palm oil imported from Indonesia and Malaysia, a trend that depends on clearing rainforests for oil palm plantations.

The price of grain is now tied to the price of oil. Historically the food and energy economies were separate, but now with the massive US capacity to convert grain into ethanol, that is changing. In this new situation, when the price of oil climbs, the world price of grain moves up toward its oil-equivalent value. If the fuel value of grain exceeds its food value, the market will simply move the commodity into the energy economy. If the price of oil jumps to $100 a

barrel, the price of grain will follow it upward. If oil goes to $200, grain will follow.

From 1990 to 2005, world grain consumption, driven largely by population growth and rising consumption of grain-based animal products, climbed by an average of 21 million tons per year. Then came the explosion in grain used in US ethanol distilleries, which jumped from 54 million tons in 2006 to 95 million tons in 2008. This 41-million-ton jump doubled the annual growth in world demand for grain almost overnight, helping to triple world prices for wheat, rice, corn, and soybeans from mid-2006 to mid-2008. A World Bank analyst attributes 70 percent of the food price rise to this diversion of food to produce fuel for cars. Since then prices have subsided somewhat as a result of the global economic downturn, but they are still well above historical levels.

From an agricultural vantage point, the world's appetite for crop-based fuels is insatiable. The grain required to fill an SUV's 25-gallon tank with ethanol just once will feed one person for a whole year. If the entire US grain harvest were to be converted to ethanol, it would satisfy at most 18 percent of US automotive fuel needs.

Projections by Professors C. Ford Runge and Benjamin Senauer of the University of Minnesota in 2003 showed the number of hungry and malnourished people decreasing steadily to 2025. But their early 2007 update of these projections, which took into account the biofuel effect on world food prices, showed the number climbing rapidly in the years ahead. Millions of people living on the lower rungs of the global economic ladder, who are barely hanging on, are losing their grip and beginning to fall off.

Since the budgets of international food aid agencies are set well in advance, a rise in food prices shrinks food assistance. The World Food Programme, which is now supplying emergency food aid to more than 30 countries, cut shipments as prices soared. Hunger is on the rise, with some 18,000 children dying each day from hunger and related illnesses.

The emerging competition between the owners of the world's 910 million automobiles and the 2 billion poorest people is taking the world into uncharted territory. Suddenly the world is facing an epic moral and political issue: Should grain be used to fuel cars or feed people? The average income of the world's automobile owners is roughly $30,000 a year; the 2 billion poorest people earn on average less than $3,000 a year. The market says, let's fuel the cars.

For every additional acre planted to corn to produce fuel, an acre of land must be cleared for cropping elsewhere. But there is little new land to be brought under the plough unless it comes from clearing tropical rainforests in the Amazon and Congo basins and in Indonesia or from clearing land in the Brazilian cerrado. Unfortunately, this has heavy environmental costs: a massive release of sequestered carbon, the loss of plant and animal species, and increased rainfall runoff and soil erosion.

While it makes little sense to use food crops to fuel cars if it drives up food prices, there is the option of producing automotive fuel from fast-growing trees, switch grass, prairie grass mixtures, or other cellulosic materials, which can be grown on wasteland. The technologies to convert these cellulosic materials into ethanol exist, but the cost of producing cellulosic ethanol is close to double that of grain-based ethanol. Whether it will ever be cost-competitive with ethanol from grain is unclear.

There are alternatives to this grim scenario. The decision in May 2009 to raise US auto fuel efficiency standards 40 percent by 2016 will reduce US dependence on oil far more than converting the country's entire grain harvest into ethanol could. The next step is a comprehensive shift to gas-electric plug-in hybrid cars that can be recharged at night, allowing most short-distance driving – daily commuting and grocery shopping, for example – to be done with electricity. An even more fundamental need is to restructure transportation systems to provide far more options than the personal automobile.

As the leading grain exporter and ethanol producer, the United States is in the driver's seat. It needs to make sure that efforts to reduce its heavy dependence on imported oil do not create a far more serious problem: chaos in the world food economy. The choice is between a future of rising world food prices, spreading hunger, and growing political instability and one of more stable food prices, sharply reduced dependence on oil, and much lower carbon emissions.

Adapted from Chapter 2, "Population Pressure: Land and Water" in Lester R. Brown, Plan B 4.0: Mobilizing to Save Civilization (New York: W.W. Norton & Company, 2009), available online at www.earthpolicy.org/index.php?/books/pb4

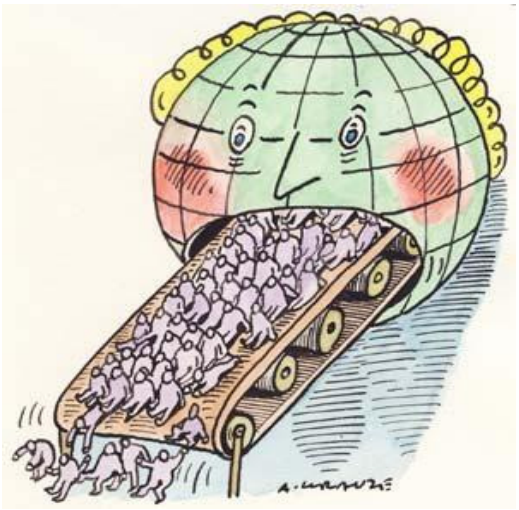
Global Overpopulation

Article by Gordon Limburg, Bushland Management Consultant and Vice President Hornsby Conservation Society

As a bushwalker for about seventy years and Bush Regenerator for twenty of them, I have become very conscious of the need to conserve the natural environment on which our survival depends. It seems to me that our own species is threatened with extinction, unless we can soon start to control the now recognised threat to our own survival: global overpopulation.

One lesson impressed me at school, when World War II and the drought we had known for most of our lives had come to an end. We were reminded that someone in the distant past planned to store enough water to supply Sydney for seven years, equal to the longest drought in memory. We knew Australia's population numbered over seven million. We learned that scientists had calculated the world's driest inhabited continent could support a maximum population of twelve million through a prolonged drought. When sheep farming was a major industry that was called the country's carrying capacity. Then came the startling revelation beyond our comprehension: most of us would live to see Australia's population exceed twelve million.

I don't recall if anyone then dared to predict that, encouraged by a slogan – *Populate or Perish* – some of us might still be around when Australia's population reaches twice that number. People laughed at the suggestion that our biggest cities would come perilously close to running out of drinking water, or that towns would actually run out of drinking water, yet both of these happened before the desperate situation, that people had proved unable to control, was saved by rain.



It was more than sixty years later when Kelvin Thomson began to develop a population plan for Australia. Kelvin Thomson belongs to a political party which has tolerated his ideas because they believe few people have taken any notice of him so far. As the Member for the Victorian electorate of Coburg, he described Australia's problem of over-population to Federal Parliament on 17 August 2009. When he looked at the figures, he realised a reasonably simple 14-point plan could solve the nation's problem. All that is missing is the will to do it.

Dick Smith read it, thought about it, and was persuaded by the obvious common sense in the 14-point plan. In his own words, he became a disciple, and offered to support the campaign. On Friday 7 May 2010, he organised and financed breakfast forums, held simultaneously in six capital cities, to spread the word. As the second speaker in Sydney, Dick Smith told the audience that after he became a grandfather recently, he began to think about his granddaughter's retirement. He asked a scientist who he believed would know: "at the end of this century, there's a good chance my granddaughter will still be alive, but will she have enough to eat?" The answer was, "probably not".

The world's population has already exceeded its capacity to produce the food it needs. More than a billion people are starving now. The past practice of clearing vegetation for arable land has no future. In Sydney, irreplaceable arable land is being used to build houses. The fact that every state is now working to desalinate sea water, not for emergencies, but for everyday drinking and to grow food to eat, is surely evidence that our population has already exceeded the continent's carrying capacity.

Dick reminded the gathering that he is a wealthy businessman. He does not need to go on making more money from further increases in the population of Australia, or of the World, at the expense of those people who would be born to starve. He is aware that this campaign is not welcome among his fellow wealthy business folk, but he would rather spread the message he believes has been ignored for far too long: it is a myth that bigger is better. Better for whom? Australia's population exceeded its carrying capacity many years

ago, and the only people who might benefit from any further increase are wealthy people like himself, and some politicians.

Nothing else will matter unless we can:

- slow, then stop the increase in the world's population; and
- reduce the world's present overpopulation.

We can only have a minute influence on the rest of the world, but we should do what we can, and set an example for others. The rest of the world followed when our Prime Minister decided to close down Australia's whaling industry and saved some whale species from extinction.

The wealth of a nation is expressed as the national Gross Domestic Product, but for each of its citizens, a more realistic measure would be the Gross Income per Person. The wealthiest nations, per person, are not those with the biggest populations. In fact, eight of the top ten nations in terms of per person wealth have populations of fewer than ten million.

The slogan for today has become populate and perish.

More details can be found at:
http://www.kelvinthomson.com.au/speeches.php
http://www.smh.com.au/opinion/editorial/population-debate-we-have-to-have-20100328-r51d.html

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Environmental News

WWF Footprint calculator survey: Australia has one of the world's largest ecological footprints per capita. We clearly exceed the earth's capacity to continue to support our current lifestyle. We can however make some simple changes to our lifestyle that would provide relief for the environment.

How? Check out your personal results from the WWF footprint calculator.
See: http://www.wwf.org.au/footprint/calculator/?utm_source=Email&utm_medium=Email&utmcampaign=Futuremakers

From the ACF: Dropping emissions trading unacceptable

A government decision to shelve emissions trading until the end of 2012 is totally unacceptable. "To put comprehensive climate action in the too-hard basket until 2013 would be bad for the environment, de-stabilising for business and totally unacceptable to the millions of Australians who want government leadership on climate change," said ACF Executive Director Don Henry.

"We need leadership from Government and Opposition on an issue Prime Minister Kevin Rudd has described as the great moral and economic challenge of our time. The delay will put the Rudd Government nearly three years behind in its election promise to introduce an emissions trading scheme in 2010."

"Australia is already feeling the effects of climate change and we will suffer much more if we further delay action. Our leaders can help leave a less polluted and safer world to our children by making big companies pay for the pollution they produce and investing the revenue in building a clean economy and jobs."

"China, the EU, Japan and other countries are acting on climate change and investing at scale in the clean energy economy. If we don't take action we'll be left behind with a 20th century, rust bucket economy. ACF is looking for all political parties to go to this year's election with strong climate change policies that they will implement in the next term of government."

From the WWF: Dangerous pesticides remain on your shelf?

The Australian Pesticides and Veterinary Medicines Authority (APVMA) yesterday called for a mass recall of quintozene, after discovering that it contained a contaminant that is a type of dioxin. Despite the APVMA's request for a mass recall of the toxic fungicide quintozene there are still too many outdated and dangerous agricultural chemicals being used in Australia, WWF warned today.

"While it is good to see the APVMA take this sort of action for one particular pesticide, they need to be much tougher on the range of other dangerous pesticides still available for sale in Australia," said WWF's spokesperson Juliette King. “At least eight chemicals have been under review by the APVMA for 13 years or more for suspected human health and environmental impacts. That's far too long to ascertain a chemical's safety, especially when the chemical is still sitting on shelves," she said.

“It's the APVMA's job to protect us all from these dangerous chemicals but they've been an agency characterised by delay and inaction and they rarely appear to adopt a pre-cautionary approach."

The toxic pesticide, atrazine, has been banned in Europe since 2007 but is still widely available in Australia. Atrazine is part of a cocktail of chemicals that has been detected up to 60 kilometres within the Great Barrier Reef World Heritage Area. US Geological Survey scientists yesterday said they'd discovered links between atrazine and tissue abnormalities in fish, as well as reduced reproduction and spawning. The study appeared in the journal Aquatic Toxicology.

The highly poisonous insecticide endosulfan has been banned in over 60 countries and is being considered by the Stockholm Convention's Review Committee for a global ban because of its toxicity to humans and wildlife and ability to bioaccumulate, yet it still remains available for use in Australia.

Another toxic pesticide diuron has been under review in Australia since 2002. Despite interim findings of unacceptable risks to seagrass and dugongs in the Great Barrier Reef Marine Park, it remains available for sale. “The APVMA needs to catch up with the rest of the world and take a much more precautionary and proactive approach to regulating dangerous pesticides in Australia.”

Nuisance birds in our suburbs

STEP Committee member Tim Gastineau-Hills writes the first of a series of articles on our local bird life.

It is a prolific time of year for citrus trees in our gardens and many STEP members and readers of this newsletter will no doubt share the frustration of seeing a significant amount of ripening fruit pecked and torn apart by our native wonder, the sulphur-crested cockatoo.

To deter these vandals, you may have tried decorating your citrus with strips of cellophane, CDs or DVDs, mesh covering, or even resorted to the humble scarecrow. However, now you can give them a dose of Saturday Night Fever. (No, we're not spreading a contagion here, although it does sound scary, which is exactly what we want!)

A recent article in the Sydney Morning Herald featured Hunter Valley winemaker Rod Windrim, who has introduced disco balls into his vineyards. The unpredictable light flashing off these glittering balls – the same principle behind hanging CDs and cellophane – has reportedly helped scare off cockatoos, silver eyes and leatherheads, cutting grape losses from 50% to about 5%.

This new tactic is quickly catching on, through orchards to the ordinary home garden. While Rod chose standard disco balls of 30cm in diameter, mini-disco balls found in party shops are perhaps more suitable for home-use, at about 10cm in diameter.

The sulphur-crested cockatoo is one of Australia's most spectacular birds, and one of the most destructive. Apart from citrus calamities, suburban cockies are well-known to employ their powerful beaks to cedar panels and decking timber, window sills, barge boards, synthetic grass tennis courts, plastic/rubber roof sealants... the list is endless. They also dig into bowling and golf course greens, for grass seeds. Perhaps the cockatoo's most unusual habit is stripping away the foliage of trees, without any intention

to eat. In my area, Magnolias and Liquidambars particularly suffer.

Why do they do this? It is often simply attributed to boredom, however there are better explanations. Firstly, the cockatoo's beak never stops growing and snipping at things keeps a cockie's beak in trim. Secondly, while feeding or roosting, it is a cockie's natural instinct to clear away excess foliage for an improved visual outlook, particularly for a lookout for predators. The third reason is protection of the nesting area. Cockatoos will routinely strip off branches and bark below their nests to deter goannas from climbing a tree.

There are many other effective, or semi-effective, bird deterrents used, from ultrasonic whistles, radar-activated 'whaa-whaa' speakers, propane cannons, gas guns, and even shotguns. But why annoy or scare off your neighbours (and their pets) when you can bedazzle with disco balls, and host a 70s-themed party to boot?

Vineyard glitz – Rod Windrim, whose glitter balls have cut his grape losses from 50 per cent to about 5 per cent. Photo: Jonathan Carroll (SMH)
http://www.smh.com.au/national/winemaker-has-a-ball-as-cockatoos-flee-20100129-n48q.html

STEP Walks

STEP offers a variety of walks for both experienced and casual ("recreational") walkers. We started our programme in February with a recreational walk and intend to alternate on a monthly basis. STEP has adopted safe walking guidelines to apply to both series of walks and all require some reasonable level of fitness. Due to sometimes rough terrain, none are suitable for young children or those with walking difficulties.

The walks are aimed at both existing STEP members and any others who simply want to get out into the wonderful local Australian bushland. Normal bush walking standards apply, that is bring your own supply of drinking water, something to nibble for energy, suitable shoes, hat, sun screen, insect repellent and weather protection if required.

Sunday 11 July: Two Creeks Track

A pleasant walk from Lindfield Station to Middle Harbour via Two Creeks Track. Return via Little Digger Track to Roseville Station (or short walk back to Lindfield).

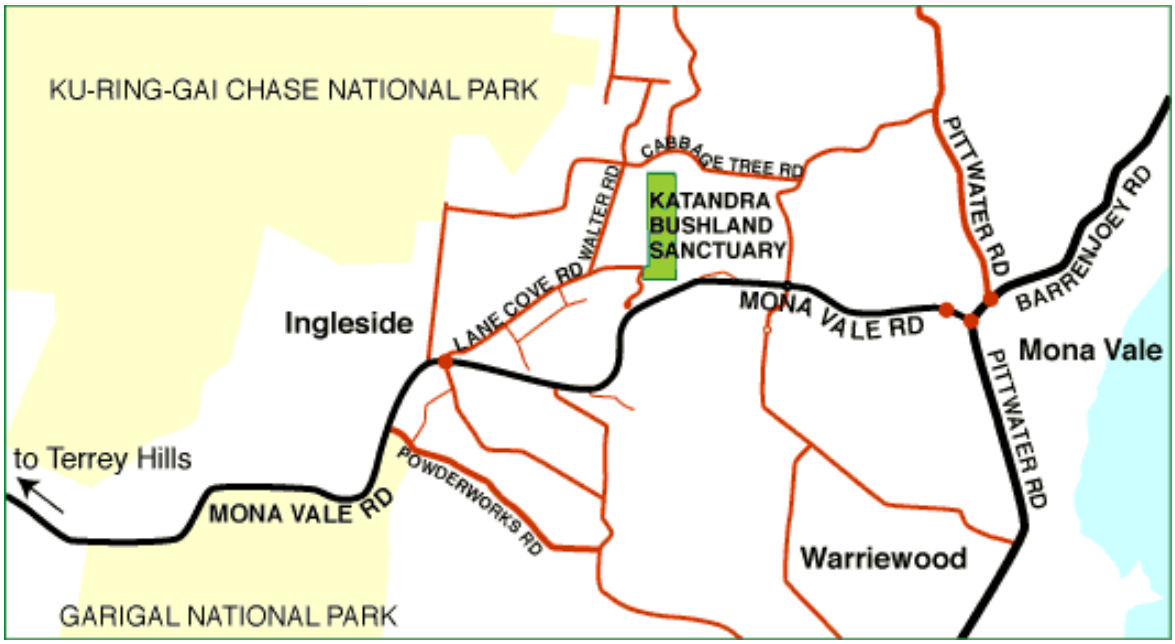
Meet: Lindfield Avenue outside Lindfield Railway Station at 1 pm for 1.10 pm start
Length: 8 km **Estimated Duration:** 3 hours **Difficulty:** Medium
Contact: Andrew Little – 9924 7212 after 6 pm

Sunday, 15 August: Katandra Bushland Sanctuary

Katandra Bushland Sanctuary is a Crown Reserve administered by the Department of Land and Water Conservation and managed by Katandra Bushland Sanctuary Trust.

The sanctuary covers 12 hectares and is situated on the Ingleside/Warriewood escarpment. Katandra is a sanctuary for flora and fauna where the wildflowers are their most colourful during spring but all year round there are opportunities for bird watching.

Katandra is located on Lane Cove Road, Ingleside. See page 15 for all details.



Meet: Lane Cove Road, Ingleside. Meet @ 9.45.
(UBD Map 137 Q3, Sydway Greater Sydney Map 199 C11)
Length: 4-5km **Estimated duration**: 2 hours approx **Difficulty**: Easy, but undulating terrain

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Spring walk: (Details to be advised)

Sunday 17 October: Lover's Jump Creek, Turramurra

Meet: Macrae Place. Suggest park cars at top of Macrae Place where it joins Burns Road and walk down Macrae Place to the end.
(Gregory's Map 101 F15, Sydway Greater Sydney Map 236 D20). Meet @ 9.45.

Length: 3km **Estimated duration**: 1 –2 hours **Difficulty**: Moderate

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STEP Watch: Commercial filming in Lane Cove National Park?

A STEP member recently reported seeing a commercial film unit and crew operating in a section of the National Park which has been set aside as a threatened species protection area. Under the current protocols, as STEP understands them, the high quality upper valley bushland additions to LCNP are out of bounds for such commercial activities.

STEP has raised the matter with Park management, who have confirmed that it is not "usually policy" to allow such filming in environmentally sensitive areas. No more please!

Order Form for STEP publications or membership application/renewals*

Membership (renewals due 1 July)		Unit price	Quanti ty	Cost
Single	1 year	$16		
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Family	1 year	$20		
	3 years — saving of $12	$48		
Life		$200		
Sydney's Natural World (cost to non members is $47.50)		$40		
A Field Guide to the Bushland of the Upper Lane Cove Valley		$30		
Maps of Walking Tracks (cost to non-members is $20)				
Lane Cove Valley		$15		
Middle Harbour Valley. Sheets 1 and 2 Bungaroo and Roseville Bridge		$15		
Middle Harbour Valley. Sheets 3 and 4 Northbridge and North Harbour		$15		
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***Subscription renewals**: Multi-year members will be advised when their renewals fall due.

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