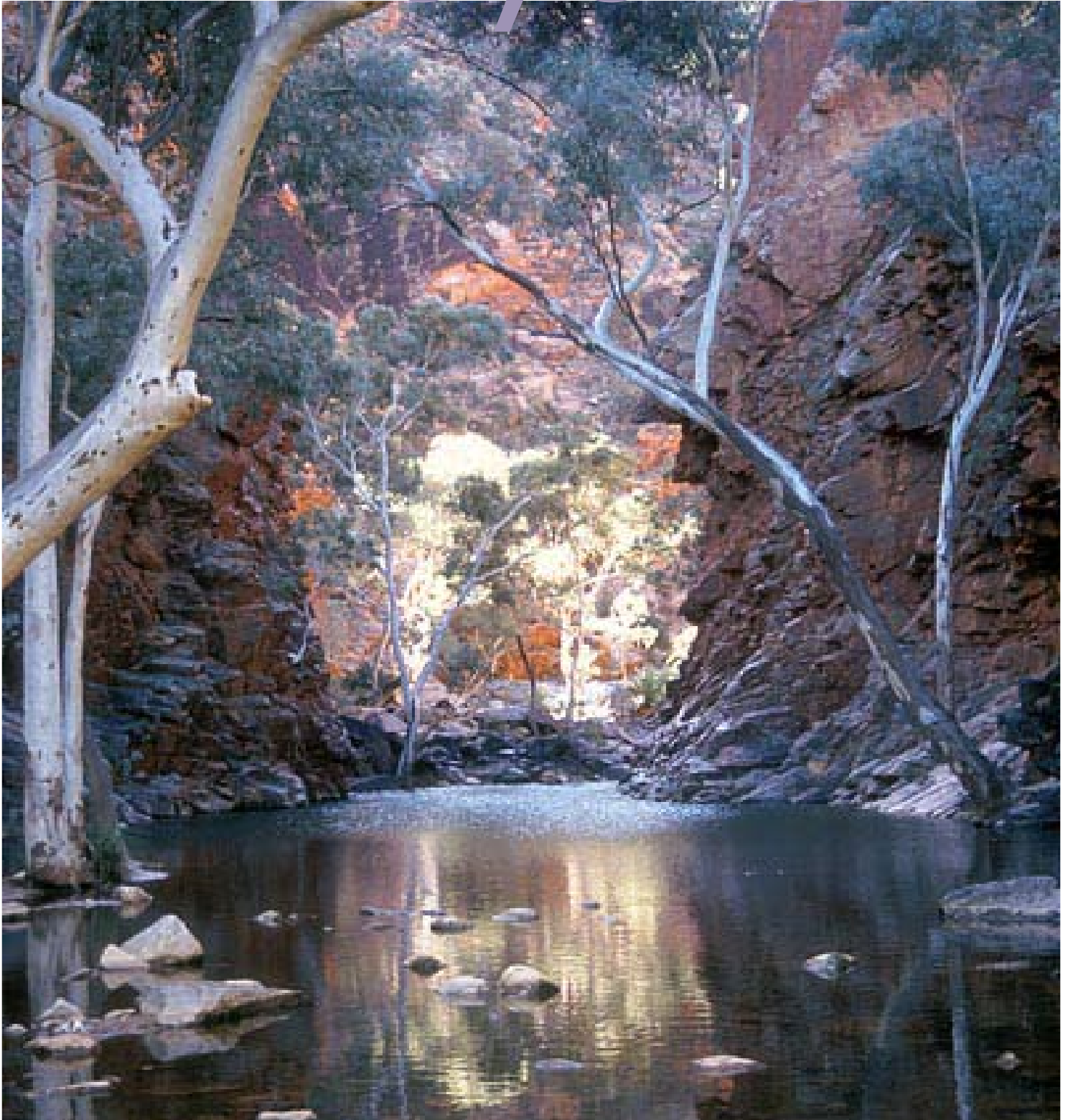




BeyondEP



IN THIS ISSUE: Water Quality in Agriculture ■ The Right to Water ■ Art and the Environment

Australia is in the thick of the debate on how to achieve sustainable development.

Climate change, water use and energy consumption affect our every moment.

It appears that the country is uniquely positioned to feel impacts – and there is rising social feeling that Australia must take a position of leadership on action.

The Government might point to the helpful United Nations Environmental Program which suggests that Australia rates highly in implementing all its suggestions for encouraging sustainable development. The Living Planet Report, however, suggests a different story: Australia was ranked sixth in the world in 2006 in terms of the

demands that each resident places on the world's natural resources.

BeyondEP covers many of the over-use issues in Australia and the world – water and consumption feature appropriately as we head into what has been described by politicians as a one in a thousand year drought.

It has been my pleasure to work on this latest issue of BeyondEP, highlighting the work of the students and academics associated with the Office for Environmental Programs. It has also been a delight to work with The Community and Industry Advisory Board, staff and students at the University of Melbourne. In January I return to Massey University, New Zealand, to take up the Foundation Chair in Pastoral Agriculture.

The Office will be in the good hands of



Associate Professor Lee Godden, as well as those of Helen Duckham, Louise Wilson and Pete Morgan. All of us are committed to environmental sustainability, and all of us look forward to working with you again in 2007

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World Environment Day

World Environment Day, acknowledged and celebrated on the 5th June, provides a moment for those on campus who are concerned with and about environmental issues, whether individuals or groups, to connect. The Office for Environmental Programs organises a Breakfast each year in conjunction with the Environmental Health and Safety Unit, Property and Campus Services.

The keynote speaker at the breakfast was the Hon Tom Roper, who was in Australia (from his home base in New York) to attend a GreenFleet (Australia) Board meeting, and then give various talks around the globe in his role as Project Director of the Global Sustainable Energy Islands Initiative (the role of which is to

provide assistance to Small Island States seeking to introduce renewable energy and energy efficiency measures).

Since his retirement after 21 years in the Victorian Parliament (Australia), Mr Roper has been an active Board member of the Washington DC based Climate Institute, and the Prague Institute. His message to the breakfasters was unequivocally that the world has lost the plot, that we cannot take the climate change implications too seriously, and that every single one of us has a role to play in mitigating our impacts.

The breakfast was supported by university speakers from the Environmental Health and Safety Unit (Property and Campus Services) and the Melbourne University Student Union Environment Department.

Mr Tony Kelly, Managing Director of Yarra Valley Water, was present to talk about the importance of water management.. He chairs the Victorian Water Industry Sustainability Task Group, and is also Chair of WaterAid Australia. He awarded the Yarra Valley Water prize to students from the Graduate Environmental Program to Stephen Makin (2004) and Jaana Dielenberg (2005).

Visy and CartCollect, two of the University's preferred recycling agents were present to talk about their work. Visy is involved with recycling the University's paper and cardboard; the company supplied the paper cups, plates and napkins for the breakfast. CartCollect provide an empty toner cartridge collection and recycling service.

BeyondEP

MAGAZINE OF THE OFFICE FOR ENVIRONMENTAL PROGRAMS, THE UNIVERSITY OF MELBOURNE



Editor Jacqueline Rowarth
Sub-editors Helen Duckham, Felicity Wilmot
Design Blue Vapours
Photography TBA

Further details about research and events described in this magazine are available through the Office for Environmental Programs. Details are correct at the time of printing.

Biological soil crusts



Suzanne Clark’s research with Professor Mark Burgman (School of Botany) on the biological soil crust in the Long Forest Mallee produced some unexpected results – including the presence of two species of moss not previously recorded in Long Forest: *Barbula crinita* and *Goniomitrium acuminatum* spp. *acuminatum*. These mosses are typical of dry areas (*B. crinita*, for instance, has a number of features designed to prevent water loss, and has been recorded in Antarctica).

Biological soil crusts are a community of organisms that form an intimate relationship between the uppermost layers of the soil and multiple, unrelated organisms including lichens, mosses, liverworts, hornworts, cyanobacteria, green algae, and fungi. Ecologically, their role includes carbon and nitrogen fixation, enhancement of soil nutrition, regulation of soil temperature and water infiltration, reduction of water and wind erosion, and provision of niches for plant seedlings and invertebrates. Although biological soil crust species play an essential role in ecosystem processes, they are often overlooked due to their size, cryptic nature, and difficulties in identification.

Suzanne investigated the temporal and spatial change of the flora within a fragment of woodland using samples collected over a 40-year period. From her results she was able to suggest that although intermediate disturbance could be tolerated by species, overall survival would be enhanced by reducing the effects of trampling by walkers, limiting the spread of introduced plant and animal species (particularly rabbits), and preventing and controlling soil erosion. Monitoring of species is important to gauge effects – and increasing public awareness of the ecological role and importance of soil crust species is a given.

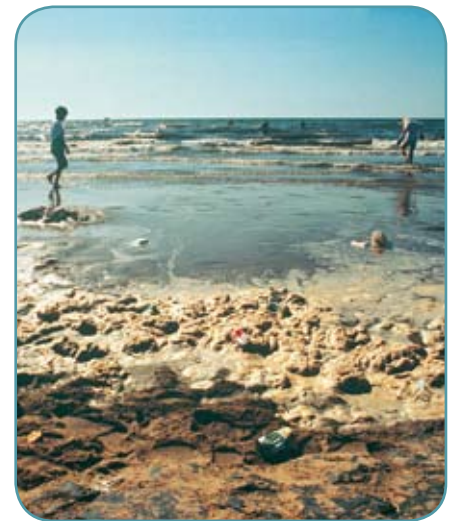
Sustainability

“Are we fiddling while Rome burns?” was the question Kath Rowley asked at the beginning of her research on sustainability with Dr Peter Christoff (SAGES). After examining the state of play, and explaining the need for action, she considered the various tools, plans, and frameworks that have been proposed at different levels from cities to the globe in recent times.

Kath’s conclusions are that the United Nations Environmental Program fostering sustainable consumption (the development of cleaner and safer production and consumption patterns that lead to increased efficiency in the use of natural resources and reductions in pollution) provides some appropriate building blocks for Australia. Although changing consumption patterns will be a complex task, she does not believe the task is impossible – there are tools, models and public support for action.



As the benefits to change become known, change for the better will occur at a faster rate. Kath points out that with a move to sustainable consumption Governments will benefit from less disruption and cost caused by environmental damage, a more efficient economy, a level economic playing field, global competitiveness and less risky infrastructure. They could also deliver improved quality of life to their citizens, and secure a long-term electoral advantage for their far-sighted strategy. Industry could gain through savings from efficiencies, enhanced profile, consumer confidence, growing market share, and an enhanced competitive position. And civil society could enjoy a cleaner environment, better health, more interactive communities, and better quality of life. As Kath says, “What more do we need?”



Coastal communities

Benny Asirvathan is deeply concerned about coastal resources in the Tamil Nadu region of India. There are 680,000 people deriving their living entirely or partly from fishing the coast line of 1076 km – this is a 47% increase in numbers since 1986. Fish catch is declining in the face of 8,500 mechanised craft and 41,000 traditional craft. In 1969, 1028 tonnes of the pelagic fish *Lactarius lactarius* (false trevally) were caught; by 1973 the catch was 175 tonnes. Fishers are travelling greater distances (45 nautical miles instead of up to 12), and fish to greater depths (20 fathoms instead of 2-5), to catch fewer fish (150 kg instead of 500) than was possible in the past. As a consequence, poverty is increasing. Approximately 40% of the fisher folk are estimated to be in debt. Their income of US\$350 is below the state average of US\$465.

By examining coastal communities in other countries, Benny was able to identify sustainable economic development strategies. He then analysed similarities between those countries and Tamil Nadu, to see which strategies might be transferable. Benny proposed Community Based Coastal Resource Management as - not a guaranteed solution - but a framework for improvement. The new program will require financial support from government, as well as internal and external agencies. Alternative work, as well as education, will also be required.

Water quality and agriculture – too little too late?

Dr Bert Quin, a fertiliser and environmental consultant, has been working in sustainable fertiliser use since doing his PhD in Chemistry over 30 years ago.

He gave the fourth Community and Industry Advisory Board seminar of the year in October, speaking to over one hundred undergraduate and postgraduate students, as well as members of the industry.

For Dr Quin, keeping water safe and clean is of vital importance – and is a cheaper option than cleaning up dirty water. He points out that we are finding workable alternatives to fossil fuels for energy, but nobody has yet conceived an alternative to clean, safe water.



In the last century, discharge of nutrients into inland surface waters, groundwater and the sea has increased up to 100-fold. This discharge has been associated with excessive weed growth, algal blooms and unpleasant odours, declining numbers of fish species, and declining diversity of species overall. It has also been

implicated in the slow death of coral reefs. The discharge has come from industry, including agriculture.

Of course these discharges were unintended: the implications for the environment as industry developed, supporting a developing economy and increased population, were not understood.

In agriculture, intensification of land use resulted in increased nutrient content of the soil, which in turn meant more nutrient loss when soil erosion occurred. Intensification with stock also increased leaching of nitrate nitrogen (N) from under dairy cow urine patches, particularly in free-draining soils. Direct losses of fertiliser nutrients in run-off and leaching have also increased.

Dr Quin's research in New Zealand and Australia has addressed all of these issues.

Sediment loss can be minimised by wise placement of farmed land, riparian protection for waterways, preventing stock access to waterways, and avoiding high soil nutrient concentration.

Direct leaching of nitrate from fertiliser is usually a significant problem only if annual rates of application are greater than 200 kgN/ha, but each cow urine event deposits 500-1000 kgN/ha in the area of the patch. Plants are usually able to use only approximately 20% of this before the rest is lost.

Nitrate leaching from urine patches can be reduced by treating the whole pasture with nitrification inhibitors. This is cost



effective where N-fertiliser (urea, for instance) is being applied frequently so that the inhibitor can be blended in, and where irrigation ensures that the depth of penetration of the inhibitor is the same as the urine. The challenge is to achieve depth of penetration without losing background nitrate and so increasing leaching.

An alternative under investigation is 'Taurine' – 'a Tail-Activated URine Injection of Nitrogen Extender'. Taurine gives direct inhibitor treatment to the urine patch. It is cheaper in terms of materials than whole-pasture application, and automatically ensures equal penetration to the same depth as the urine.

Other alternatives under investigation include changing the diet of the cow to provide an improved balance of energy and protein (resulting in less N excretion), and the use of feed pads in winter (allowing collection of effluent).

Direct losses of nutrients can also be reduced. Dr Quin's research has shown that using urease inhibitors reduces both leaching and gaseous losses of nitrogen, and so allows improved N uptake by pasture – 30% improvements are common.

For phosphorus (P), where 60% of loss occurs directly from soluble fertiliser such as superphosphate and DAP (diammonium phosphate), changing the fertiliser form can be extremely effective. Research has recorded 57-73 times more dissolved reactive P from soluble P fertilisers than from reactive phosphate rock (RPR), for instance. For slightly acid soils, where moisture is available, RPR offers huge environmental advantages.

Dr Quin has been working on combining all his research, and that available in the literature, to develop Farm Environment Risk Assessment Maps (FERAMs), which are now being used by farmers and consultants.

His success is based on the challenge he sets himself – to look at every aspect of what we do and how we do it, and ask the question – is there a better way?



Dr Quin is the Managing Director of Quin Environmentals, a company promoting safer use of fertilisers: fertilisers for optimum production and environmental protection.

The Quin Environmentals Award was established in 2006 to acknowledge the student who has contributed most in the Graduate Environmental Programs to the understanding of how fertiliser use and/or land application of waste can be managed so as to simultaneously improve the efficiency of nutrient uptake and minimise any adverse environmental effects.

The Right to Water

Water. It is a global issue. It is becoming 'Blue Gold'.

Maude Barlow, National Chairperson for the Council of Canadians, Director for the International Forum on Globalisation, and recipient of honorary doctorates from six Canadian Universities, spoke on the 'right to water' at a public seminar co-hosted by Watermark Australia, the Faculty of Land and Food Resources, and the Community and Industry Advisory Board in October.

Maude regards access to clean water as a fundamental human right. She believes that nobody should be able to appropriate water for personal use and gain. But conflicts over water are occurring everywhere, and 2 billion people access only dirty water. A child dies from waterborne disease every 8 seconds. And it has been calculated that by 2025, two thirds of the global population will not have clean water access.

The rich in the world have water. The poor do not.

This is becoming the greatest social inequity of our time, as rich countries take water from the poor. Sometimes this is overt. Mexico City, for instance, pipes water from the country to the city – effectively confiscating the water from aboriginals to feed the need of the urban dwellers. More subtle confiscation comes from the sale of bottled water (increasing at 20% per year) and simply from the export of food.

This is an issue for Australia.



Australia is the World's driest inhabited continent, with the most variable climate on earth. Rainfall is decreasing; salination and desertification is increasing; more than 25% of water management areas are close to or have exceeded allocation limits, but the Federal Government is still aiming at unlimited growth. Climate change is being blamed for the difficulties being faced, but water abuse is simply a symptom of irresponsible affluence. Urban water use in Australia is the third highest in the world (the US and Canada have higher use); Sydney is vying with Beijing and Mexico to be the first city to run out of water, 87 % of the crops in Victoria will fail this year because of lack of rain and irrigation - yet the Australian Government wants to increase population by 25% in urban and water-using areas within 5 years.

In Maude's view, Australia is not experiencing a drought – it is running out of water.

The solutions being offered by the Federal Government are not ones she regards favourably.

- Desalination plants are expensive and technologically problematic.
- Increased groundwater pumping will work only if there is more ground water to access.
- Water trading will increase the power of the rich.

"The Federal Government is going in the wrong direction," said Maude, "what Australia and the world needs is to accept the limits to growth, preferably before they are imposed upon us through famine, disease, and war".

Maude does have steps towards a sustainable water future.

- We need a water ethic and language, with laws to curb polluters.
- We need a global management system for water to ensure water justice.
- We need to accept water as a human right – perhaps through a United Nations treaty on water so that access is constitutionally recognised in all countries: water is a public service and must be delivered to all people.

As Maude says, nobody has yet died from the end of cheap energy.

Water is a different story.

Almost 100 people from community, industry and academia attended Maude's seminar. Discussion was lengthy, and opinion divided on whether we could achieve global sustainable water use or not. However, the audience felt that we were in a better position to face the future because of the work of people such as Maude. She was an inspiration to all those who attended the seminar.



Maude Barlow was a high-profile leader in the women's movement in Canada, serving as the Director of Equal Opportunity for the City of Ottawa and leading a national coalition against violence against women. She later became Pierre Trudeau's advisor on women's issues when he was Prime Minister in 1983-84, but left formal politics in 1985 to help found the Council of Canadians (CoC), of which she has been the elected honorary chairperson since 1988. The Council now has 100,000 members and 70 activist chapters. Its original mandate was to campaign against the Canada-US Free Trade Agreement and to fight for Canadian sovereignty in the area of natural resources (including water), social programs and foreign policy. Most of Maude's work has been focused on the regional and global trade agenda, with water being an issue of equal special concern.

Interdisciplinary Awards for Sustainability and Environmental Writing

The Interdisciplinary Awards for Sustainability and Environmental Writing were established by the Office for Environmental Programs, with the support of the Deputy Vice Chancellor (Research) Office. One award is for faculty members at The University of Melbourne, and another is for postgraduate students. In each case nominations are invited from all areas of the University for research completed within the preceding three years; for the postgraduate award it is for research completed as part of a postgraduate qualification within the preceding three years.

Associate Professor Kim Hassall is the inaugural recipient of the faculty award for his work in logistics, which combines his engineering and transport knowledge. His research on Performance-Based Standards for the National Transport Commission and the OECD has allowed a new dimension to urban logistic productivity and sustainability, and has been described as “The most important Transport Productivity Initiative in Australia for the last decade” by Tony Wilson, CEO of the National Transport Commission.

Kim’s work started in 1999 when the National Transport Road Commission adopted the framework for Performance Based Standards as the next major National Productivity Initiative for Road Freight Transport in Australia. The framework was based on relatively inflexible prescriptive regulations, and potentially prevented Australia from benefiting from the productivity gains resulting from the use of smart heavy vehicles developed overseas.

Performance Based Standards are supposed to help reduce the impact of road transport, but because there are only two axle groups on rigid vehicles, productivity gain is limited: smaller vehicles means that numbers of road journeys are high, with consequent increases in noise, pollution, and fuel consumption.

Overseas SMART heavy vehicles used for delivery include roll-coupled roadtrains with self-steering axles, over-sized container trucks, tri-drive combinations, quad-axle semi-trailers, large urban rigid trucks and such modular concepts as the Super B-Double or B-triple.

With Australia Post, Kim showed that urban delivery vehicle productivity could be improved under Performance Based Standards. Using his (?) new four-axle design, he calculated that Australia Post fleet mileage could be reduced by 6 million kms a year, most of it on local road networks. The new truck has the capacity to reduce Australia Post rigid truck fleet numbers by up to 20% and operating kilometres by 16%. There would also be significant reductions in fuel consumption and tyre wear.

Conditional registration for the Australia Post Urban Rigid Truck was given by VicRoads in July this year.

There is also considerable potential for the new truck to assist with delivery of supermarket goods ordered on-line. When one considers the various studies that have shown (e.g., in Britain) that the biggest fuel consumption in food delivery occurs between the supermarket and home, not in the transporting of bulk food from, for instance, Australia to Europe, clearly the impact of this research will be high.



The Interdisciplinary Postgraduate Award for Sustainability and Environmental Writing has been given to Philip Pegler, and Zoe Metherell, for their report on the effects of Fire and Phytophthora on heathy-woodlands in the Grampians National Park.

Phil and Zoe are Masters of Environment students, with Horticulture and Landscape Architecture backgrounds respectively. Their work in Australian Ecosystem Management was considered of such calibre that the School of Anthropology, Geography and Environmental Studies decided to publish it, and Parks Victoria are using the principles espoused in the report to assist with management practices in the Grampians National Park.

By using a space-for-time substitution study, Phil and Zoe examined the effect of time since fire on the heathy-woodland ecosystem in the Grampians, as well as the impact of phytophthora (*Phytophthora cinnamomi*). They found that a fire interval of less than 8 years will eradicate populations of species such as *Hakea decurrens*, and long fire intervals will result in population decline.

Burning areas infected with *P. cinnamomi* could reduce competition from resistant vegetation, and therefore assist regeneration of heath species sensitive to phytophthora. However, when assessing whether a particular area be burnt, they suggested that although fire stimulates reproduction and is essential for some species to reproduce, managers should check for fecundity of fire-sensitive species in order to prevent the destruction of reproductively immature populations.

Phil works with Parks Victoria in the field; Zoe works as a Landscape Architect. For both, the interdisciplinary approach encouraged by their studies in the Masters of Environment has led to improved understanding of their work; for both they are using their first degree, and their different work experiences, for environmental benefits, particularly in enhancing biodiversity. For both, combining work and study had been a huge, but rewarding challenge.

Double-practicality

Philip Sutton, Founder of, and Director-Strategy for, Green Innovations, stimulated the students in the core subject, Sustainability, Policy and Management in February, that they asked him to come back to facilitate a Plane Tree Forum.

In June he addressed the topic of “Double-practicality: making a strategic personal contribution to achieving sustainability”. The questions considered by participants (who came from all over the University) were:

1. Given what we know now (the science, etc.) what is the most sensible scale and speed of change for society? Are official goals enough?
2. How can we engage our workplaces (governments, businesses and other organisations) in effective action on the sustainability emergency? What are the best strategies?
3. What can I do in all this? How can my action be supported?

Philip challenged the participants to create a personal environmental management system, to regard spare time as a catalyst to trigger improved activities towards sustainability, and urged us to be prepared to leap-frog to new technologies, and to encourage developing countries to leap-frog, likewise. His message at the Forum, as it was at his lecture earlier in the year, is that sustainability must be mainstreamed, and we must take advantage of every new development that will assist us in the move towards a sustainable future.

Discussion centred on change models which have been successful (e.g., various wars, the internet), and why. From the beginning of the industrial revolution, the impact of humans has been escalating, but environmental awareness stagnated from the 1st World War until after the 2nd.

Legislation and incentives were discussed at the Forum as methods of encouraging desired behaviour – but participants acknowledged that these skew behaviour.

Distributed intelligence, involving a coalition of government, public and business, may be part of the model for achieving dual track management where profit and sustainability (environmental and social) are the focus. The major barrier to establishing distributed intelligence was identified as lack of critical mass (needed so that each individual contribution adds to something worthwhile). Philip

suggested that a citizen movement was needed to complement activities at work, with people working across boundaries. Dual-track management, with an environmental management system on a personal, group, and national – even international basis – provides the opportunity to avoid at least some of the impact associated with climate change.

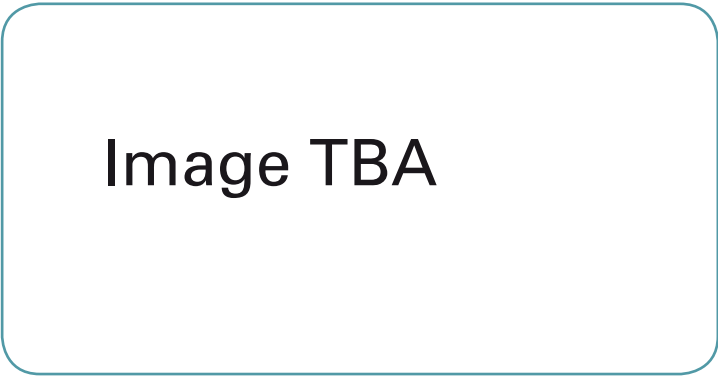
Although some participants felt that spreading the word in a convincing manner would be difficult, Philip urged us not to assume opposition. His plan, and he has been working on it for some time, is to pick off ‘soft centres’. At work he suggested that “Would you mind if I did...” or “I’m passionate about...” allow modelling of good behaviour, which might prove contagious. (The alternative, “You ought to do...” is not a successful tack.)

Successful modelling will allow dual-track management to subvert the traditional capitalist system. And approaching innovators, convincing them and so turning them into messengers, should also be part of the strategy.

Few at the Forum considered that current goals for sustainability are appropriate. Although Victoria has created a framework for the future, Australia has set no goals (and has not ratified the Kyoto Protocol) and the global consumption of resources in general and fossil fuel in particular, is escalating.

Computer modelling can assist with building of scenarios and trying to identify which strategies will have the desired effects – the tools and the targets. Modelling can also assist with choosing ‘horses for courses’, the right tools and targets for the person, company, state, or country.

Individually, Philip is sure that we can make a difference. And with our personal Environmental Management Systems we can encourage others, whether we are at work, rest or play, to behave responsibly as well. He believes that we have ten years to make a difference – and his count down has already started.



Green Innovations is a non-profit environmental strategy think tank and advisory organisation promoting the timely achievement of global and local ecological sustainability. Philip’s work is focussed on environmental management systems for sustainability-promoting organisations, and on

strategies for achieving an ecologically-sustainable economy. Over 15 years ago he was selected by The Age Newspaper/Melbourne University Politics Department ‘Agenda Project’ as being one of the twenty most influential people in Victoria in the environmental policy arena. He has been involved in many government advisory groups since then. In 2002-2003 he was the President of the Australian and New Zealand Society for Ecological Economics, and in 2004 was elected President of the Sustainable Living Foundation.

Art and the Environment in the Potter

Nobody would doubt that the environment influences, and frequently provides the inspiration for, great art. Jon Cattapan, Melbourne painter, is influenced by the urban environment.

His work seeks to recall the fragmentary nature of the urban experience, offering insight into the individual's sense of dislocation and isolation in the sprawling metropolis. Cattapan has lived in a range of cities, including New York, Melbourne and Canberra. He finds certain aspects of city living to be universal - homelessness, street violence and the coexistence of extreme wealth and poverty in one location are just some of his themes. He sees 'The City' as "both an enchanted site, a place of dream-like juxtapositions and as a more conscious field of competing cultural information often psychologically frayed at the edges".

The conjunction of an exhibition of Cattapan's work at the Ian Potter Museum and Art Gallery, and World Environment Day, stimulated Henry Gaughan, Manager Development and Public Programs, to propose a new event with the Office for Environmental Programs.

When Art and the Environment meet with academics, great debate follows – and the community is drawn in.

Associate Professor Janna Thompson, then director of the Centre for Applied Philosophy and Public Ethics at the University of Melbourne, suggested that environmental philosophers have largely ignored the city. They tend to focus on wild nature and put most value on nature that has not been tampered with by humans, hence the city is the antithesis of what they most value. Furthermore, many environmentalists have adopted from the Romantics the idea that the city is unnatural and bad, and that the best life for humans is a life close to nature. However, although the city does have a bad environmental record, because it sucks up resources from its environment, if people were to leave the city they would cause much more damage.

Janna suggested that an environmental ethic for the city environment should begin by acknowledging that there are many positive features of city life, but what makes a city exciting and liberating has negative aspects. The major problem is that cities encourage irresponsible behaviour because the dwellers are divorced from the impacts their consumption has on the rural landscape.

BeyondEP

BeyondEP is produced on 100% recycled paper using vegetable inks by the Office for Environmental Programs, University of Melbourne, Victoria 3010. It features work by students and academics connected with the Graduate Environmental Programs, and events organised by the Office. For future events, please see www.environment.unimelb.edu.au
Contact details: phone 03 8344 4773 / 5073 or Query-environment@unimelb.edu.au



L-R TBA

Future improvements to city dwelling can play on the sense of civic responsibility apparent in an increasing number of city dwellers. The means of communication and action that a city makes possible enables them to organise and come together - to carry out a task (like cleaning up a creek) or to protest against a policy.

A further consideration is that many people love their city; they regard it as their place and want it to flourish and be enjoyed and cherished by future generations. Those who want cities to become more sustainable need to pay attention to how a city becomes something that people want to preserve. Art has a role to play.

Associate Professor Nick Low, from Architecture Building and Planning, showed how architecture, art and the environment have been interfacing for many years. The Exhibition La Ville Art and Architecture 1870-1993 involved two parallel galleries with open sides. On one side the planners exhibited with their three basic tools of the building, the plan, and the aerial perspective. On the others were the painters with their acute and emotionally loaded observation of the city: chaos, disorder, and violence, were interspersed with tranquillity, movement, anxiety, domesticity, and pollution.

Nick considers that the role of the painter is to be a ground level observer of cities freed from the landscape of the drawing board and the straight line. To the painter falls the task of observing the human face of cities, and the human-building interaction. They are social and passionate commentators, able to observe the impact of cities on artist and architect Hundertvasser's five skins - the epidermis, clothes, the house, society and hence identity, and the environment (local and global).

For Nick, planning a Green City means encompassing the micro to macro level, considering the human experience of the city, and working to protect our fifth skin.

The event was Chaired by Professor Peter McPhee, Deputy Vice-Chancellor (Academic) and covered by ABC Radio, and The Age. The theme for 2007, on the 4th June, is water in the Australian Landscape – speakers have already been arranged.

