

# Permaculture and the Third Wave of Environmental Solutions by David Holmgren

(Based on a series of public lectures around Australia following launches of his new book  
*Permaculture: Principles and Pathways Beyond Sustainability* 2002 Holmgren Design Services)

In Australian popular culture, permaculture is a style of organic gardening, for those a little more informed it is often seen as self reliant living. Although it is these things, it is also much more. Rather than directly answering that most obvious but also most difficult question; What Is Permaculture? I want to address the opportunities and challenges of the emerging third wave of modern environmental innovation. For permaculture activists to understand this current wave we need to see it as part of a larger pattern. In the process of outlining the diverse influences of the permaculture concept and movement on Australian landuse and society, I want to illustrate how permaculture thinking in general and more specifically the ideas in my book can be applied to both understanding and positive action in a world of uncertainty.

## Innovation at the Edge

The impact of any idea or innovation on society is generally measured by its effects in the social mainstream. A conventional view suggests ideas that influence society spread outward from the centres of power and information. The permaculture design principle *Use Edges and Value the Marginal* reminds us of the contrary view that innovation usually arises from the edge rather than the centre. The natural world provides us with a great range of examples of how biodiversity and productivity are greatest at the edge between different ecosystems. These observations were the foundation for the valuing of edges and margins in the original conception of permaculture by Bill Mollison and myself in the mid 1970's.<sup>1</sup>

Along with the evolution of permaculture concepts at the fringe of society, 25 years of activism have influenced more mainstream environmental solutions in many different ways. New concepts, innovation which results from these concepts and partial and progressive adoption of these innovations by society tends to follow a pulsing pattern which reflects social and economic cycles. The ecological model for this pulsing pattern is another concept which I explore in the book under the principle *Creatively Use and Respond To Change*.

Permaculture has contributed to two pulses of environmental innovation and activism and I am convinced we are in the early stages of a third wave of environmentalism. After seven years of work on this book I can now see it as a contribution to the innovative edge of that wave.

A little history of the modern waves of environmentalism

Environmentalism can be as a response to the problems of modernity over almost two centuries but with notable phases in the late 19th Century and again in the 1930's. But environmentalism as we generally understand it developed slowly through the 1960's accelerating in the 1970's. The Club of Rome's *Limits To Growth* report in 1972 shifted the focus of the growing environmental awareness from impacts on nature to impacts on humanity. The oil crises of 1973 and 1975 dramatically underscored the problem and spawned a great wave of environmental innovation such as passive solar building design, alternative and intermediate technology, rural resettlement (back to the land movement) and intentional communities. Permaculture was one of the concepts which came out of this wave with the publication of Permaculture One in 1978. At the same time oppositional green politics reached unprecedented heights with the Franklin dam election campaign of 1982.

Energy efficiency and some other innovations of this first wave were incorporated into the mainstream but the "greed is good" culture of the mid 1980's pushed environmental issues off the public agenda. While the energy crisis appeared to have evaporated (mostly illusion), official recognition of the Greenhouse Effect provided another great rallying point for a second wave of environmental innovation in the late 1980's and early 90's. Again permaculture was part of the process with the publication of Bill Mollison's encyclopedic *Designers Manual* in 1988 and the very successful ABC TV series (which included Bill Mollison) *The Visionaries*. The huge interest in permaculture led to the follow up *Global Gardener* series in 1989 looking at permaculture solutions around the world.

Organic agricultural certification and marketing, Landcare, a renewed interest in ecological buildings, co-housing, ethical investment were other expressions of this second wave all of which had strong cross overs to permaculture. Again green politics flourished but by the mid 1990's this second wave was largely spent as economic growth, new technology and corporate propaganda took hold.

The foundations for the third wave of environmental innovation were laid by the simultaneous emergence in the late 1990s of greenhouse weather impacts and strong evidence of imminent peaking and inevitable decline of global oil supplies. The adverse impacts of globalisation, the dot com bust, corporate scandals and the failure of Kyoto, Johannesburg and other global policy frameworks has led to another loss of faith in mainstream economic and social security.

Increasing interest in rural resettlement,<sup>2</sup> intentional communities, farmers markets, ecological building and permaculture all suggests a third wave of environmental innovation.

This third wave will provide new opportunities for mainstream consolidation of previous environmental innovation but it will also provide new challenges to all environmental concepts and movements including permaculture. We will also see plenty of desperate diversions. For example the politics of fear and terrorism and economic pump priming by war. So how can a concept which the public associates with mulch gardens and chooks contribute to such weighty and complex issues?

To answer this question we need to understand more fully the range of ways in which permaculture has already influenced Australian society and landuse.

### Permaculture as positive and healthy activity

Permaculture had been seen by many as a positive and healthy activity; bettering ourselves and society while sustaining nature. It has:

- reinforced non threatening, even traditional values of self reliance and frugality.
- provided empowering alternatives to oppositional politics for young people in a world of despair.
- promoted a self reliant home life and rural resettlement for families wanting a better environment for their children
- supported older people with ways to apply and integrate the skills & experience of life towards a more sustainable future.

Permaculture as also been a catalyst and incubator of progressive ideas in several fields.

- In agriculture permaculture has influenced innovation in revegetation, agroforestry, new tree crops, bush tucker, organic and biodynamic methods, catchment and whole farm planning, as well as other productive use of nature's abundance.
- In the rapid growth of Organic agriculture permaculture has promoted farmers markets, subscription farming and other alternatives to corporate globalism;
- In the Ecological Housing scene permaculture has promoted integration of attached greenhouses, waste reuse systems, new and recycled building materials and helped maintain the owner builder movement in the face of restrictive and misguided regulation.
- In Community Development, permacultural activists have been central in both the start and spread of community gardens and city farms as well the evolution of co-housing and eco-villages which are at the vanguard of the ecological solutions revolution.
- In Ethical investment permaculture activists in Australia started the shift from negative to positive investment criteria (that is investing in what we do want rather than simply avoiding what we don't want like, tobacco and uranium mining).
- A wide range of alternative economic solutions have been promoted and initiated through permaculture including LETS (Local Energy Transfer System), farmers markets, subscription

farming and Willing Workers On Organic Farms. It has also promoted many new areas of business activity in eco-tourism & environmental education.

In subverting the prevailing policies, permaculture has often acted as an invisible agent of influence within more mainstream organisations. For example;

- In the Conservation organisations, most notably the Australian Conservation Foundation permaculture activists have been successful in promoting environmental solutions and even a proactive development agenda alongside the more traditional promotion of awareness of problems and anti-development action.
- In the Landcare groups and government departments permaculturalists have influenced all levels from local groups to public policy to advance the permaculture agenda.<sup>3</sup> For example the CSIRO multi- million dollar research project Redesigning Australian Agriculture looks very much like a permaculture influenced project. I have to say that in some areas such as management of pest plants and animals, the kill and burn brigade has the distinct upper hand at the moment.
- In Overseas & Aboriginal Development; permaculture has provided a conceptual framework and an alternative label for those committed to more integrated community based solutions.
- In Tertiary and TAFE Education; permaculture has directly addressed the interest of students in alternatives to sterile amenity horticulture and toxic food production systems.

## Permaculture Defined

So permaculture is a conceptual framework and an emerging design system rather than any specific technical or behavioural solution. Its focus is the redesign and integration of our lifestyles, livelihoods and landuses in keeping with ecological realities. But what are these ecological realities?

All ecological and human systems are underpinned by the flow, storage and quality of available energy. The laws of energy are some of the most important and yet apparently uncontroversial aspects of our scientific culture. Despite broad agreement by scientists about these laws, society, its economy and values appear at first analysis to contradict them.

Rather than being outside or even momentarily contradicting nature's laws, industrial systems and culture simply reflect their unprecedented high quality (fossil) energy base. Permaculture ethics, design principles, strategies and techniques may be seen as rejecting the viability and value of these systems. The foundation for that rejection is not simply based on emotional distaste but reflects the inevitable peaking and decline in the fossil energy base. Much of my book is about explaining these links between energy laws, ecologic and economic realities and permaculture concepts and solutions.

The concept of energy peak and inevitable decline which informed the first wave of environmental solutions but was sidelined by the Greenhouse effect in the second wave, is the central issue for the third wave.

The evidence for imminent energy peak was well debated by the experts in late 90's and shows global oil supplies peaking between 2003 and 2010 while a few so-called optimists are still talking about another 2 decades before economic action and policies will have no effect in preventing the decline in oil supplies.<sup>4</sup>

Gas, the other high quality energy source for sustaining the growth economy, will peak in maybe 2020-2030 according to most experts.

Although our governments continue to apparently ignore these hard realities, they are driving current global economic and political systems in ways that are both obvious and not so obvious. The third wave of environmental innovation will centre around real time adaptation to energy descent and the accelerating economic and social changes it generates. In the larger scheme of history, the Club of Rome *Limits to Growth* report in 1972 was only a decade out in its predications of the onset of resource constraints in rich countries. How will the permaculture concept and movement evolve and be transformed by this new context?

In whole heartedly proclaiming the reality of energy descent, I run the risk of being labelled as yet another "prophet of doom" by not only the mainstream media but also by some environmental entrepreneurs and activists who are yet to see energy descent as positive.

In calling my book and the concepts within it, permaculture, I am taking the risk that it will be sidelined in the transformations of energy peak and descent as quaint ideas of the passing era of affluence and peace.

On the other hand, I believe the most fundamental and conceptual aspects of permaculture still provide the best framework for creative adaptation to energy descent . With this book, I aim to

provide permaculture activists with better conceptual tools for designing better local solutions as well as proclaiming the importance of these conceptual tools to a wider audience.

Rather than a fatalistic acceptance of decline as depressing, or an evil to be resisted at all cost, permaculture is the affirmation of the prosperous road down. Rather than a retreat from the pressing issues of our times, I believe permaculture is the real alternative to craven dependence on what the masters of consumerism and war dole out, in return for our collective complicity, in their solutions to energy descent.

### Mainstreaming Permaculture

The third wave of environmentalism is providing a range of opportunities for many permaculture concepts, processes and strategies to influence more mainstream society.

Some examples include:

- **Green Suburbs:** There are many proposed residential developments which are open to influence especially in regard to the “edible landscape” and “community governance” models provided by smaller permaculture projects and eco-villages.
- **Sustainable Land Use Certification:** There are opportunities for permaculture to provide a more wholistic framework for moving organic agriculture certification forward to stay ahead of the marketers and regulators driving a pack of more conventional food and forest product certification schemes. The IFOAM conference in Adelaide in 2005 will be a particularly significant event in this regard.
- **Permaculture Education Accreditation.** After two decades of permaculture design courses in the open market place, various systems of formal accreditation by government and other bodies are set to emerge. The opportunities and constraints these of processes will be challenging.
- **Green Politics;** With increasing local and parliamentary representation and even power, green politicians urgently need pro-development policies. Although there are a wide range of concepts, strategies and projects which are jostling for recognition at this level, permaculture has an important role to play.

We should celebrate and move forward with these integrations of permaculture concepts into the mainstream, with or without the permaculture label.

### Some Strategic Bottom Up Opportunities: Succession beyond Permaculture

Mainstream adoption of permaculture concepts and innovation may deplete the energy and rationale behind the permaculture movement with its own organisations, gatherings and publications. For example it is over two years since the movement lost its flagship *Permaculture International Journal* (to the GST after effects) after 24 years of publication. On the other hand *Organic Gardener*, a glossy publication associated with the very popular ABC Gardening Australia TV program, is, in fair measure, the Permaculture Journal in disguise.

While my book reinforces the adoption of some widely accepted environmental principles such as *Produce No Waste* and a host of strategies and techniques, it is also full of ideas and examples of more creative working with nature. Many of these permaculture strategies and even principles directly challenge many current environmental orthodoxies which further separate us from nature and threaten to stall the environmental revolution

For those not satisfied that mainstreaming is the only game worth pursuing, the permaculture concept and movement has the potential to catalyse a more radical but positive environmentalism as the reality of energy descent become clearer. I see a possible bifurcation of permaculture between the invisible but influential mainstreaming on the one hand and more radical innovation and challenge from the edge. As economic contraction and fascist politics threaten the longer term viability of mainstreaming strategies, energy descent will provide new opportunities for bottom-up social processes more invisible and more subversive than the mainstreaming of environmental innovation.

For example I see WWOOFing as a model for harnessing the catalytic energy of nomadic youth as a free and anarchistic but positive alternative to work for the dole, the army and other spin offs of the drift to fascism.

The permaculture environment and lifestyle of older rural settlers and activists can provide young people with the skills, networks and access to land necessary for self reliance in uncertain times. This learning by immersion, empowers people to see and experience what is relevant as well as the pitfalls. For established land owners and families, learning to share their lifestyle, will provide household economies of scale and greater security in older age. Nomadic youth will act like pigeons seeding ideas and options from place to place, an invisible organic mirror of the internet.

Wwoofing and other creative ad-hoc solutions for sharing and exchange such as barter, community dinners, farmers markets, and LETS are examples of positive anarchism. They provide fall-back strategies for fostering both local community and open networks in the event of more severe degradation or even collapse of economic and social order. Rather than being defeatist, these solutions are more likely to be successful than many of our more cherished hopes for sensible society-wide adaptation to energy descent.

Rather than being an argument for abandoning all efforts at mainstream environmental innovation, these more radical grass roots solutions reflect the proverb “Don't put all your eggs in one basket” and are one more example of how the permaculture design principle *Use and Value Diversity* applies to the ongoing environmental revolution.

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<sup>1</sup> Mollison & Holmgren *Permaculture One* Corgi 1978 currently out of print

<sup>2</sup> For an overview of Rural Resettlement see Article Five in *David Holmgren Collected Writings 1978-2000* Holmgren Design Services CD 2002

<sup>3</sup> See *The Landcare Movement: Community Based Design and Action on a Scale to Match the Continent* 1995 in *David Holmgren Collected Writings 1978-2000* Holmgren Design Services CD 2002

<sup>4</sup> For one of the most authoritative sources see C. Campbell *The Coming Oil Crisis* Multi Science Publishing 1997 For a wide range of resources about global oil peak see [www.hubertpeak.com](http://www.hubertpeak.com)