



What is Permaculture?

by Mary Roslin

SEDA members are, or are becoming, familiar with passive solar design, local materials, healthy building techniques, aware resource use, carbon footprints, recycling and reusing waste, waste prevention, grey water systems, natural sewage, rainwater harvesting - so what's missing?... FOOD... Food? What's that got to do with ecological design? And Permaculture?...say that again? Read on dear SEDA reader and enjoy the feast!

The term Permaculture was coined by its originators, Bill Mollison and David Holmgren in the mid- '70s, from the words Permanent and Agriculture, at a time before the term 'sustainable' was in common usage - now so common and misused that it is almost unusable as a word that carries any real meaning.

Their patient lengthy observations of natural systems at work in a forest location had led them to ask if it was possible for humans to learn to mimic nature in order to construct systems that are sustainable, robust and endlessly productive. Permanent Agriculture was born.

This was one of the first lists of observations:

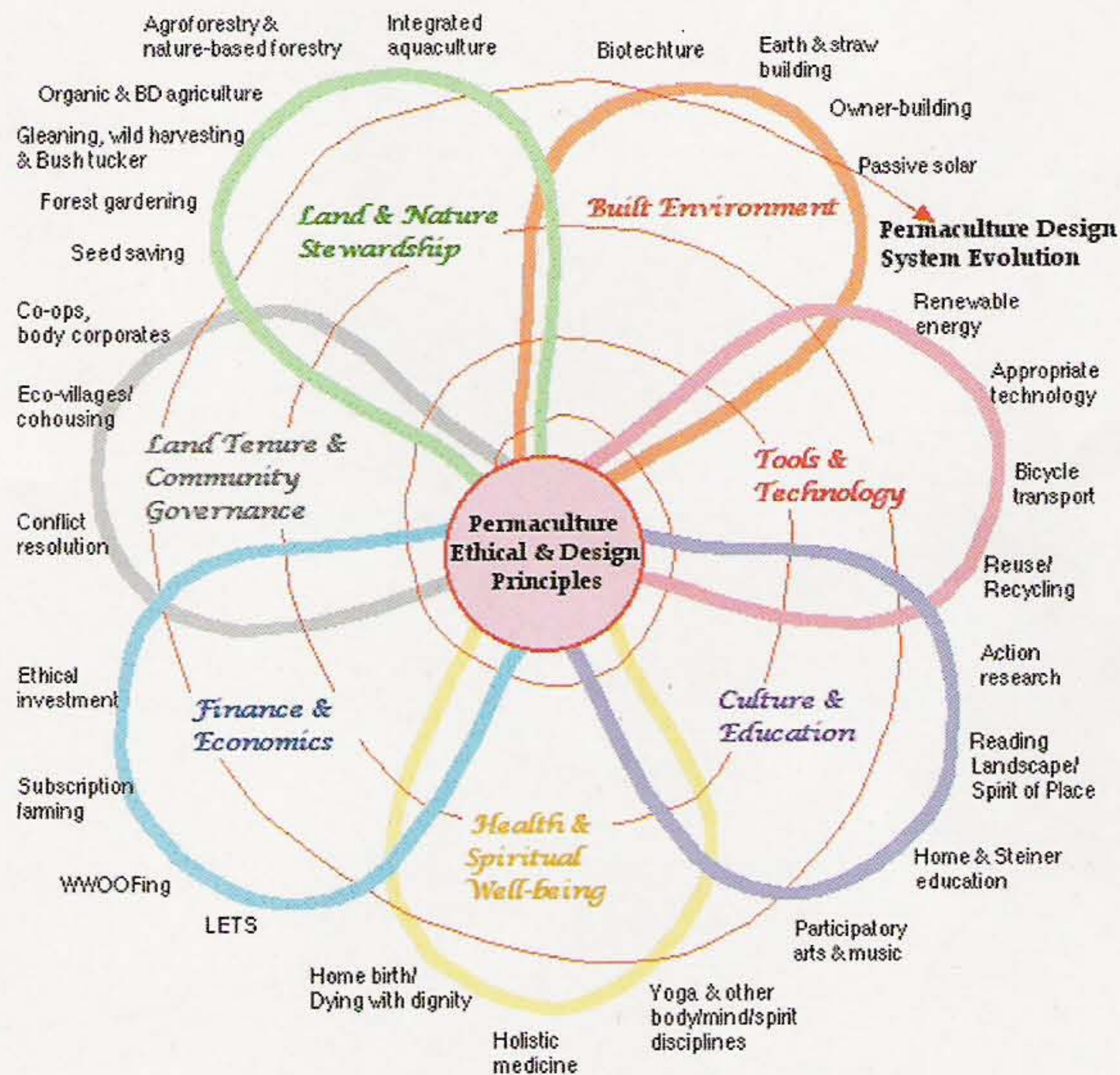
- Biodiversity gives strength - nature hates monocultures
- No waste - the output of one system is the input for the next, there is no waste in the forest - everything, but everything recycles!
- Multiple functions - everything in a design functions in many ways
- Work with nature rather than against
- The problem is the solution
- Make the least change for the greatest possible effect
- The yield of a system is theoretically unlimited (or only limited by the imagination and information of the designer)
- Everything gardens (or modifies its environment)

From *Permaculture, a Designers' Manual*, by Bill Mollison:

The 'culture' syllable in agriculture means to cultivate, i.e. grow. 'Permanent Agriculture' means a food production system that is sustainable, i.e. permanent, by

The Permaculture Flower

Starting with ethics and principles focused in the critical domain of land and nature stewardship, permaculture is evolving by progressive application of principles to the integration of all seven domains necessary to sustain humanity through energy descent.



Above: Permaculture Flower diagram used with kind permission of David Holmgren - www.holmgren.com.au/

the way in which the system is designed to interact, co-operate with and respect all the eco-systems that nurture life on earth, however they manifest locally.

It turns out that this designed system is fruitful in ways other than the production of food. It has the capacity to 'yield' building materials, clean water and transform waste, including human sewage and thus, together with the production of food can provide for all basic human physical needs.

From this work a set of principles emerged that would enable human beings to work in harmony with natural systems to the benefit of both nature and humankind.

'Permanent Agriculture', with its prime focus on the production of food, gradually became known as 'Permanent Culture' because the principles encapsulated a set of values and ethics that have the building of a life enhancing ecologically benign culture at its root.

David Holmgren originally described Permaculture as an 'integrated, evolving system of perennial or self-perpetuating plant and animal species useful to man.' He goes on to say that a more current definition of Permaculture, is 'consciously designed landscapes which mimic the patterns and relationships found in nature,



The attractions of an ethic of environmental design are manifold. A key reason for this is that good environmental design is a connected discipline. We don't seek 'iconic' buildings, with their implicit isolation, like a picture framed upon a wall to be admired only for itself, but a built environment which integrates into a whole range of needs and outputs.

When I first came across permaculture some twenty five years ago I was enthused by its essential applicability. It is something that touches on all of things that most interested me in my striving to see how we could make the world a 'better place'. It is also rooted in 'can do' attitudes - how to make the best of the resources we have. Its original basis was in 'permanent agriculture' - the provision of food and other essentials. As the discipline grew it became apparent it needed to be about the management of the whole human environment. It begs the questions:

- What do we really need and how can we get it?
- How can we minimise usage (and therefore demand)?
- How can we minimise wastage (and therefore pollution)?
- And how can we connect our human endeavours together with regard to these in ways which limit the amount of work we have to do?

Today permaculture continues to evolve in the hands of those hundreds of thousands of people who have embraced it, not so much as the answer, but as the questions

we need to ask to arrive at answers tailored to individual time, place, resources and culture.

Put simply it is a design system. Some obvious examples: by solar aspecting a building and adjusting glass areas, overhanging roof areas and the quality and value of materials in the construction process we can make buildings which harvest free heating supplies in cool weather and shade and airflow in the heat. When we do this we are observing (learning from) natural energy flows in the landscape and then getting them to work for us (saving energy cost). It's just intelligent design.

As a concept that allows you to think of all the other energy flows which we can build into our designed environment, food, water and access are early necessities. What building is incapable of being a food production zone? None. Even in urban public space it's easy to do. Why plant flowering cherries when you can have fruiting ones (which also, obviously, flower). 'But people will eat the fruit' complain the park authorities. Yes, that's the point.

An off-the-contour swale which intercepts rainwater run-off can also be a pathway. As a water harvesting mechanism it can also provide growing areas for water-hungry plants (e.g. squashes) in its banks. Or it can supply a pond. Which can support fish. We can build food forests in which we live which are largely self-managing. It's just about thinking things through. You don't have a slug problem in a garden, you have a duck shortage. And

ducks are another useful output. Every problem contains its own solution.

All sound too obvious? Well it's just common sense, but sense that isn't common enough. As long as we build housing schemes on the random suburb / maximum income per hectare plan we won't solar aspect buildings, and we won't make the environmental and cost gains of passive solar. If the drive for Scotland's healthy diet is so important, wouldn't free fruit trees in our public spaces (including school playgrounds) be a great investment, whilst also contributing to carbon capture. Too much like hard work? Scarcely. Look at the exemplary models of Grounds for Learning for inspiration on that last one. Espouse the visionary techniques of Tony Gibson's 'Planning for Real' and design and build communities that serve people's real needs and vision.

In an article this length we can do no more than touch on the potential. To realise that offering you need to do some work (low work systems always require a little work to establish them).

The first step is to connect into the permaculture network to harvest as many great ideas and fellow travellers as you could wish for in a lifetime.

Graham Bell lives in the Borders with his family and is author of 'The Permaculture Way' and 'The Permaculture Garden'.

Recommended websites:

www.permaculture.org.uk

www.permaculture.co.uk

www.grahambell.org

Recommended Permaculture websites...

Graham Bell 'Agent for Change' www.grahambell.org

In Graham's words... "This site is designed to connect you with my world of helping others develop their future. I am passionate about enterprise - and the power of enterprise to make people's lives better. My job is essentially to help other people get more out of their business. It is also a link into mycelium, a new network of other people who are capable in their own fields, but also committed to social and environmental justice."

Permaculture Magazine portal www.permaculture.co.uk

Portal web page to the various Permaculture Magazine websites including:

Permaculture Magazine;
Permanent Publications;
Permaculture Information; a Green Shopping Online

Catalogue and information on Reversing Climate Change.



Permaculture Association www.permaculture.org.uk

Home of the UK permaculture network & the Permaculture Association (Britain). The Association is an educational charity run by its members and helps people use permaculture in their everyday lives to improve their quality of life and the environment around them. The website includes: news; listings of job opportunities in permaculture; online discussion forums; an online bookshop and information on joining the Association.