

# PERMACULTURE

## What is this Action Sheet about?

It's about permaculture – a gentle way to persuade the land where we live to provide healthy food, fodder, building materials, herbs, medicinal plants and other resources for now and for the future. The principles and techniques of permaculture are used to design sustainable systems of food production that work with nature for maximum long-term efficiency.



## What is permaculture?

The word permaculture comes from **PERMANent** and **AGRI-culture**. Two Australian men - Bill Mollison and David Holmgren - invented the term in the 1970's. Integrating lessons from ecology, organic gardening, energy-efficient building and agro-forestry, permaculture principles help people to design rich and sustainable ways of living. What we might usually think of as waste put back into the system, recycling precious resources. Landscapes are designed to conserve water, energy and soil nutrients. The permaculture gardener saves time and energy by getting plants and animals do lots of the work - naturally.

## What's good about permaculture food gardens?

- Because of the efficient design, you don't need much land
- You create employment and a place to chat with friends and family
- You can feed your family with healthy nutritious food that tastes better than vegetables bought in the shop!
- You can sell excess fruit and veg to friends or the local store or swap with friends
- You can learn more and teach others how to work with soil and plants, producing healthy seeds from plants and keeping soil alive, so you get a good harvest of vegetables year after year

## **So what might permaculture food garden look like?**

Because it's all about working with nature, the design depends closely on the landscape and environment where you live. These are just a few of the principles and techniques that the permaculture gardener uses to conserve resources and protect the soil.

### **Zoning**

Permaculture gardens are often zoned so that areas closer to the home or school are the ones that require most work. Then as you get further away from the centre, the areas need to be visited less often. This means the gardener uses time and energy efficiently. Using circular vegetable beds rather than rows is another permaculture efficiency saver – you can grow more plants in the same area and it's quicker to water them.

**Zone 0:** Centre of activities - the house. This is high maintenance, high use and requires considerable investment of time and energy

**Zone 1:** Annual plants, herbs, compost, bike store and other high use activities

**Zone 2:** Chickens, other animals, orchard, greenhouse.

**Zone 3:** Water storage, main crops, field shelters

**Zone 4:** Forestry, pasture, dams, forage, beehives

**Zone 5:** Wild zone, where nature is in charge and where we go to learn and harvest only that which is abundant

### **Going with the flow**

This means making the most of natural flows of energy and resources in the garden. Rainwater is harvesting and channelled using gravity to where it is needed (See Action Sheet 13 – 15). Buildings are constructed using the principles of energy efficiency (See Action Sheet 69), and the sun's heat energy is used to full advantage (See Action Sheet 64: Solar water heating).

### **Using biological resources to shelter and feed the soil**

All organic matter produced in the garden is returned to the soil to feed it and keep it full of life (See Action Sheet 31) as compost and manure. Trees are planted to produce mulch, green manure and give shade and shelter (See Action Sheet 35: Agroforestry). Pests are controlled with natural methods, so as to avoid pollution and use of dangerous chemicals (See Action Sheet 33).

### **Recycling**

All the leftovers from the kitchen are thrown on the compost heap - so that the waste can be recycled to improve the soil. With all the kitchen leftovers going into the garden, it is much easier to separate the other waste into recyclable materials (see Action Sheet 72: Reduce, Re-use, Recycle). Some waste might also be useful in the garden, like tin cans for plant pots.

### **How can we find out more about permaculture?**

Permaculture is gaining ground in Africa. The Permaculture Association lists over 50 projects across the continent. The easiest way to learn about permaculture is to visit and work with people who already apply permaculture principles in their lives. If this isn't possible, then you could experiment with techniques and ideas described in the Soil and Water Action Sheets – many of which are part of permaculture's toolkit. The books listed below will also help.

**ACKNOWLEDGEMENTS:** This Action Sheet was written by Nancy Gladstone and reviewed by the Permaculture Association and is based on information from the following sources: Permaculture Association of Britain, Permaculture Design principles ([www.permaculture.co.uk](http://www.permaculture.co.uk)), Food and Trees for Africa/Landcare Permaculture booklet. Original cartoon by Alan Hesse.

## FOR MORE INFORMATION

### CONTACTS

FTFA – [www.trees.co.za](http://www.trees.co.za)

Permaculture Association of Britain – [www.permaculture.org.uk](http://www.permaculture.org.uk)

The URBAN section of the PACE directory has a list of permaculture projects around Africa

### DOCUMENTS

Available from Food and Trees for Africa: [www.trees.co.za/shop.php](http://www.trees.co.za/shop.php)

Working with the World

The pack includes six A1 posters and a booklet as well as a stand on which the material is placed; one side is a teachers guide with links to OBE and on the other are pictures for the learners. The topics covered are plants, animals, energy, nutrition, soil and water. In all cases, Permaculture principles are shown to be the best to get us out of our self-created messes. Questions are posed to the learners stimulate classroom debate.

- The pack costs R70 plus R25 postage

All the following booklets cost R10 (including postage)

The Greening Booklet

All about trees. An easy to use guide on everything you need to know about tree planting and maintenance

The Permaculture Manual

South Africa's first grassroots permaculture manual

My Nursery

How to set up and run a Nursery

Introduction to Sustainable Urban Greening Strategies

For Local government & partnerships with local government

The Permaculture Toolbox

Educators guide to Permaculture

A Permaculture guide for schools

An easy-to-understand look at the implementation of a Permaculture project in a comic format

Various posters on urban greening and permaculture are also available for the cost of postage only

*'Introduction To Permaculture'*

*'Permaculture: A Designers' Manual'*

Both by Bill Mollison

Earth Care Manual for Britain and other Temperate Climates by Patrick Whitefield

(Available through Eco-logic books – [www.ecologic-books.com](http://www.ecologic-books.com))

### WEBSITES

[www.permaculturevisions.com/](http://www.permaculturevisions.com/)

[www.permaculture.org.uk](http://www.permaculture.org.uk)