

## What is Permaculture?

The term permaculture is a combination of the words *permanent* and *agriculture*. It can also be thought of as a combination of the words permanent and culture.

Permaculture is a design for a perennial agriculture for all humans and their animals. It includes placing plants and animals in a specific design pattern in a fully-integrated design for energy. Permaculture is the first agriculture designed to interpenetrate all city environments - indoors and on building exteriors - as well as in open situations.

The overall aim of Permaculture design is to produce an efficient, low maintenance, productive integration of plants, animals, structures and people with the ultimate result of on-site stability and food self-sufficiency in the smallest practical area.

Permaculture means thinking carefully about our environment, our use of resources and how we supply our needs. It aims to create systems that will sustain not only for the present, but for future generations. From a philosophy of co-operation with nature and each other, of caring for the earth and people, it presents an approach to designing environments which have the diversity, stability, and resilience of natural ecosystems, to regenerate damaged land and preserve environments which are still intact.

Permaculture is about growing enough food and having a lifestyle which will enable you to become self-reliant and less dependent on the marketplace and agencies outside of your control. Permaculture is a way of life. It is about taking responsibility of your life and doing the things you feel are important for your own well being, for the well being of others and to help the environment.

When the permaculture movement began some twenty years ago many people wanted to know "how is permaculture different from organic gardening?" It is true that, in those early years, permaculture was embraced by organic growers. Today, however, a wider spectrum of members consider themselves to be permaculturists.

The establishment of a permaculture design involves two inter-related steps; choosing the species and designing the system. Careful thought is needed to consider the types of food you want to grow and what else you feel is essential to your environmentally conscious lifestyle. For example, you may want your house to be passive solar and use little energy. You may be able to harness wind or water energy in some way or utilise goats for milk and meat.

One of the principles of permaculture is to use the least possible space to produce the greatest amount of food. Food can be grown in and around homes, street verges, parks, schools and vacant land. Permaculture is applicable to urban, suburban and rural areas. The difference between it and normal agricultural methods is the diversity of organisms in the permaculture system. Many plants, animals and other structures are incorporated in the design; each complementing others, and each having several functions to perform. For example, a pond can be used as an aquaculture centre, a source of water for human consumption or gardens, emergency water for fire control, and for cooling hot winds as part of a climate control method. Chickens in a permaculture design might be used for control of pests in the vegetable patch, fruit fly control in an orchard, a source of manure for the garden or methane generator, and for meat or eggs.

The design of the system is such that the maximum use of space is made with a complex planting of trees, understorey, shrubs, herbs, underground tuber and root plants, and climbers. Plantings are arranged to use every micro-climate available (such as the heat that emanates off walls, or the humidity and temperature changes near pond edges and hill slopes) and to create your own micro-

climates for even greater diversity.

External factors such as wind, fire, temperature extremes and light are regulated or utilised by the careful placement of roads, dams, buildings, fences and plants. For example, plants may be used to deflect cold, winter winds or hot north-easterlies, or to trap sunlight to warm or cool buildings.

Low maintenance of the system is essential. The amount of human effort and energy expenditure is kept to a minimum. A permaculture system might use a variety of fruit and nut trees which produce year after year, a variety of animals to restore and nurture the land, and a variety of plants which are self-seeding and which can be used as a source of green manure, shade, or to filter and clean water.

What should be stressed is that each permaculture design is unique: there is no one design for all people, properties, soil and land types, or climate. What works in some designs may be inappropriate for another. Plant and animal species are chosen to suit the local conditions as much as possible.

Permaculture designs do take time to establish, but once they are implemented they become more and more productive. A larger range of useful products become available, the level of maintenance decreases and the system becomes more complicated. It is at this time that you sit back, relax, admire your handiwork and think of other things. The designer then becomes a recliner.