



## **Regenerating Place: An Introduction to Permaculture**

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Permaculture, or permanent culture, is a system of ecological design that creates more sustainable homes, neighborhoods and communities. Permaculture, however, isn't just sustainable, it's also regenerative. For example, present rates of soil loss are not something we want to sustain; a permaculture system will build soil to its optimal health. Permaculture

was developed in the late 1970's in Australia by Bill Mollison and David Holmgren, and is based on several disciplines including ecology, sustainable agriculture, natural building, community building, and indigenous peoples' wisdom.

Permaculture employs the wisdom of nature to create systems that produce food, shelter, and energy. Permaculture is taught in permaculture design courses around the globe. Today, there are over 4000 independently operated permaculture projects in 120 countries. Through understanding patterns in nature, permaculture students learn how to grow food, manage water catchment and storage, utilize renewable energy and build community.

At its core, there are three permaculture ethics—earth care, people care and fair share. Out of those ethics emerge a series of principles that guide permaculture design. These include:

1. Consider relative location.
  - Permaculture system elements, such as animals, gardens, structures or equipment are placed in relationship to others for maximum benefit to allow more efficient use of space and to minimize energy expended. From a functional perspective, things that are used together are placed together. For example, the compost bin is placed so that it is easily accessible from the kitchen and close to the garden, preferably uphill.
2. Each element performs many functions.
  - Each vital element and need in a permaculture system is supported in more than one way. For example, a pond may function as habitat, used for recreation, irrigation and for fire protection.
3. Each important function is supported by many elements.
  - Every element in a permaculture system has many uses and functions (also called stacking functions). For example, water on a farm may be provided by a well, a rain barrel, a cistern and a pond.
4. Create efficient energy planning for house and settlement (called zone and sectors planning).
  - Components in a permaculture design are placed in a way to minimize the use of energy (both human and fossil fuel), and utilize energy and resources from both on and off-site as effectively as possible. For example, the kitchen garden is placed garden right outside the door of the home so one's slippers stay dry on the way to pick cilantro for a morning omelet.
5. Foster energy cycling and recycling.

- There is no waste or pollution in a natural system—the output from one natural process is always utilized by another natural process (there is no *away* in nature). Within a polycultural system, reuse and recycle local resources as many times as possible. For example, compost extensively to create soil. As worms help break down the compost, worm castings build soil fertility.
- 6. Use and accelerate natural plant succession to establish favorable sites and soils.
  - Work with the processes of natural systems and nature to help facilitate and accelerate natural growth. For example, when establishing an orchard, plant hardy and fast-growing species that will create a protective environment for other delicate plants from strong wind, rain, or harsh sun.
- 7. Utilize the diversity of beneficial species for a productive, interactive system.
  - Plan to integrate a variety of beneficial food, plant and animal species into the landscape to build a polycultural system that provides for the needs of humans and other species. For example, a permaculture system might contain bees, chickens, an orchard, kitchen gardens and a pond to create a dynamic edible landscape.
- 8. Use edge and natural patterns for best effect.
  - There is frequently more life on the edge where two systems overlap as resources can be utilized from both systems. For example, in a permaculture system, create a wavy pond edge rather than just an oval to create more habitat.

Permaculture ethics and principles are the foundation of the design framework, and out of them grow strategies such as sheet mulching, key line design, swales and plant guilds—all key permaculture design techniques. Permaculture design may be applied in both rural and urban settings at the home, neighborhood, community, region, or nation scale.

At the scale of a home garden, for example, a permaculture designer first asks, “How does nature build a garden?” After thoughtful observation, we can see that nature gardens like a forest, with multiple layers, diverse species and thick mulch to create healthy soil. A permaculturist would use these strategies to build a permaculture polyculture (or multi-species) garden. Looking at what these layers might include, viewed vertically, we might see:

- Roots – such as potatoes or carrots;
- Herbaceous layer – such as lettuce or kale;
- Ground cover—such as strawberries or chamomile;
- Shrubs –such as blueberries or raspberries;
- Low Story –such as dwarf peach trees or figs;
- Upper Story—such as apple or persimmon trees; and
- Vining—such as grapes or hardy kiwi.

As more edible forest gardens are planted, water caught and stored, and natural buildings created, permaculture is helping to lead the way to a more regenerative future across the globe.

**For more information, see [www.blueridgepermaculture.net](http://www.blueridgepermaculture.net)**