PERMACULTURE

"PERMANENT AGRICULTURE" or "PERMANENT CULTURE"

Permaculture is a term that was coined in 1978 by an Australian ecologist named Bill Mollison and his studend David Holmgren
Mollison defines permaculture as "a design system for creating sustainable human environments."

~PERMACULTURE ETHICS~

*Care of Earth
*Care of People
*Self Control of Consumption and of Population;
Returning the Surplus

WASTE = UNUSED RESOURCE and WORK= UNMET NEEDS

~Process of Permaculture Design ~

*Based on Permaculture Ethics

Observation;
Asses the needs and resources of the land

What condition is the land in and why? Does it need restoration of some kind? What plants already grow naturally and are they healthy looking?What are the themes of the land? Where are the Sacred Sites? What plants and practices are native to the area? Observe wind, water, erosion, rate of change, etc.

Formulate a vision

What are the goals for those living on the land? Consider what ideas, time and skills everyone can offer, this is the invisible infrastructure in the community.

Conceptual design

What structures and systems are needed to support the goals and themes of the land?
This includes renewable energy, natural home building and other appropriate technologies;
along with landscape design, animals, water systems, native ecosystems, enhancement of special spaces…

Final plan

Place all of the elements in a "functional matrix"- Design your land in a way that creates beneficial connections between all of the elements, mimic nature. Use permaculture design principles: create functional relationships in close proximity, each element has many functions, stacking and filling in the niches…

Following through

What are the short and long term goals? What are the priorities? What are the sources for labor, materials, budgets and financing.

~URBAN PERMACULTURE~
In an urban setting one must constantly think back to the principles of permaculture.
*The problem is the solution
* Stacking functions
* The edge is where the action is

Permaculture principles can be applied in any setting.
You are only limited by your own imagination.

Urban Permaculture includes:

*Building Greenhouses along sides of buildings, on decks or porches, on roofs, in vacant lots, or even in old cars and vans (get creative!).
*Planting gardens on roof tops, in vacant lots or along the sides of parks.
*Turning grass lawns into gardens that produce food, habitat for wildlife, and beauty.
*Using buildings to cultivate plants that need a climbing space or partial shade.
*Filling the niches of the city with easy to grow food like cherry tomatoes, raspberries or squash.
*Painting the sides of buildings white to increase sunlight in shaded areas.
*Using trees and fences to grow vines, no space should be left empty.
*Taking down fences to combined yards for an open usable piece of land.
*Creating communities through meeting your neighbors and growing food to share with them.
*Setting up water catchments that are used to water the plants.
*Growing useful plants like rosemary, aloe, comfrey or wheat grass for house plants.
*Sprouting your own edible sprouts (easiest and fastest food to grow).

*Examples of urban permaculture taken from Bill Mollison's Permaculture A Designer's Manual

Poster by: Kindred Sparks

~Permaculture Principles~

Observing and replicating nature- a designer must never stop observing the natural process of life and the many systems and patterns within the environment.

Connecting elements through relative location- a permaculture site should be designed so that every element within the design is placed in a way that creates time saving connections and useful relationships.
*A permaculturists knows that it is the number of connections between elements that creates a healthy ecosystem, not the number of elements.

Harness and Store Energy and Other Useful Resources - Through constant observation a person can identify the useful resources that naturally flow through the land. It is important to use every resources to it's fullest. By saving and reinvesting resources we maintain the systems while still capturing more resources.

Each Element Performs Multiple Functions - Stacking the functions of every element is a key principle for creating and maintaining a sustainable permaculture site. Every element should have at least two purposes, this calls for a lot of creativity when setting up a design.
Even plants should have multiple functions. It is important to choose plants that play multiple roles within the ecosystem, such as something that is edible, good mulch and a nitrogen fixer, or something that is aesthetically pleasing but also works to repel insects.

Each Function is Supported by Multiple Elements – Just as all aspects of an eco-system are supported through many elements it is important to do the same on your land. Redundancy protects when one or more elements fail.

Make the Least Change for the Greatest Effect- Find the points in your design where the least work creates the most change, and work from there.

Use Small Scale Intensive Systems - Start close to home with the smallest system that will do the job and slowly build on your successes with different variations.

Increasing Edge Within a System – The edge is where the action is. It is the intersection of two environments and therefore is a high accumulation point for energies and materials. (1+1=3)

Natural Plant Succession and Stacking - A permaculturist practices succession planting to ensure that something useful is always growing and being harvested from an area. Stacking plants is a way to fill in an area and leave no open space. Open space is something that is rarely found in nature.

Diversity- A permaculture site should be as diverse as a healthy eco-system.

Energy Cycling - Energy produced by systems on site should be re-used as many times and in as many ways as possible.

Appropriate Technology - Always consider the impact of every item used.

Biological Resource- Recognize and make use of your on-site resources, such as plants and animals that reproduce, fertilize, build up over time and beneficially interact with other elements.

Turn Problems into solutions- Mistakes are tools for learning and opportunities for improvement.

Get a Yield - Plan for immediate and long term return from land.

124. THE BRONX, NY, USA.
The Green Guerillas transform vacant land in urban wastelands to productive, beautiful, and recreational usages as city farms.

128. BLACK FOREST AREA, SOUTH GERMANY.
West or sun–facing walls in cities and towns provide radiant heat for marginal crop here an espalliered pear grows well and "softens" the wall of an urban barn. We can therefore regard most urban buildings as *additional* agricultural space as are trellis systems over alleys, shopping complexes, up building walls, etc.