Lesson Five
How do you apply permaculture ethics and principles?

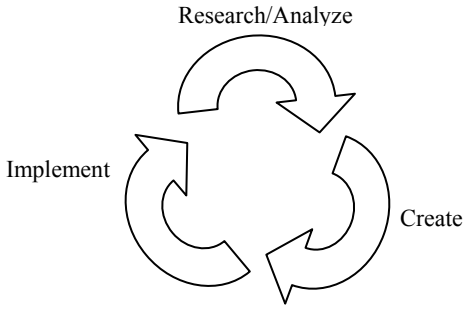
In this lesson you will learn:

- A three-step process for designing or redesigning a site
- The concept of site characteristics
- The concept of sector design
- The concept of zones
- The concept of needs and yields

The most common way to apply permaculture is by selecting a place where you want to incorporate permaculture practices. The place can be your own life or a physical space such as your home, an empty lot, a field, or your yard. The physical space may be urban or rural, may contain buildings, and may be populated. In other words, the site could be any place you choose. In permaculture the place is often referred to as a "site" and the process of incorporating permaculture practices is referred to as "site design". Once the site has been selected, you can begin the site design or redesign process.

The site design/redesign process

1. Research/analyze the site
2. Create the site design
3. Implement the site design



1. Research and analyze the site

We need to remember that each site is unique. Although the permaculture principles are universally applicable, the way we would apply them is going to vary depending on the site.

The key to designing your site is to observe it for a long time. You want to create a system that's going to work well and sustain itself without a lot of human intervention. To do that requires careful planning and extended periods of observation. Permaculture emphasizes the idea of observing nature and imitating the patterns found in nature. It also emphasizes the interconnection of all the elements or things in a system and the relationships among them. "To enable a design component (pond, house, woodlot, garden, windbreak, etc.) to function efficiently, *we must put it in the right place."*

(Introductoin to Permaculture, Bill Mollison and Reny Mia Slay, Tagari Publications, 1991, Tyalgum, Australia, p. 5). That is the purpose of this step in the process.

Here are five ways to research and analyze the design site:

Identify the characteristics of your site - Examine its topography, climate, soils, water, flora, fauna, and infrastructure. You can locate existing maps of the site and create some of your own to document your findings.

Analyze the human element - Whose space is it? What are their goals and resources? Both the people and the earth need to be cared for.

Analyze incoming energies - What direction is the sunlight coming from? The wind? Pedestrian traffic? Sector design is the term used for observing and documenting the energy flows from these and other elements that might be present at a site during different times of the year. A sector drawing would show the different directions in which energies from these elements are flowing in and would help determine where to place elements when designing a site.

Analyze according to zones - Zones are another concept to use in design work to help place elements. Each zone is determined by how frequently you go there. Elements requiring more attention or used most frequently would be placed in the zones visited most frequently. An ideal location for an herb garden, for example, would be by the kitchen door.

Zone 0: The home (occupied almost constantly)
Zone 1: The immediate outdoors (visited daily)
Zone 2: The yard and garden (visited several days a week)
Zone 3: The food forest garden (visited weekly)
Zone 4: The woods and meadow (visited monthly)
Zone 5: The wilderness (visited yearly or never)

Analyze needs and yields of the site's elements - What will each element produce or contribute to the site (output)? How many resources will it consume (input)? How much effort will you need to expend to maintain it? Remember the principles of stacking functions, repeating functions, and reciprocity. Permaculture is a holistic design system and we need to consider the relationship between all the elements in the system.

2. Create the site design

Using your findings from the research and analysis phase of the design process, create drawings showing the placement of different elements in your site. The site design drawings can have a timeline since it may not be possible to implement all of your design at one time.

3. Implement the site design

The implementation may take place over a period of time. You can begin small and gradually extend the implementation as time, income and other resources permit. Changes in nature usually occur gradually over time.

Activities

1. Do a brief analysis of your living space.
   Who are the humans that occupy your living space?
   Which direction does the sun come from? The traffic?
   What are your zones?
2. What are your needs and yields? What elements in your system meet your needs?
   What elements do you provide inputs for?