

Permaculture Design and Sequence

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Permaculture philosophy is expressed in a design process which seeks to comprehend and orchestrate the evolution of a climax ecosystem. One that interfaces with both existing natural systems and human culture. The purpose is to meet human needs through a practical system of land use that complements the natural order of the biosphere, where everything is connected. Creating a successful permaculture design requires sensitivity in observing and imitating nature's intricate patterns. The designer's role is to take many diverse elements and create a pattern based on functional relationships between those elements.

As a beginner, I have found the mechanics of design difficult to fathom, and have tried to simplify the design process by perceiving it as a pattern. Part of the design process pattern, as I see it, is sequence. A flexible sequential approach is an essential tool of a practical and successful design. An important benefit is the elimination of waste (flaws or errors, that can be measured in terms of time, labor, capital, unusable surplus, etc.)

An example of sequencing for a patterned earthscape could be as follows:

1) Proper placement of roads and pathways are to a great extent determined by landform. Roads of a gradual gradient tend to be much more stable (need less maintenance) and cause less erosion than steeper, if more direct, accessways. In general, a longer more gradually inclined road will prove to be the most resource and cost-efficient choice.

2) Water harvesting, distribution, and storage systems are also placed in relationship to landform. Water is stored in the highest practical location to conserve energy in the system, and distributed slowly across the contour with the slightest fall to facilitate infusion and eliminate erosion. To avoid potential spatial conflicts, water systems should be considered a companion element to access. The two complement one another well.

3) Buildings are placed to be safe, properly oriented, easily accessible, and in a location that's not appropriately suited for another function. Much information regarding these considerations would already be available to one who had given prior attention to access and water management.

4) Living structures (shelterbelts, sun arcs, woodlot-orchard complexes, forage systems, etc.) are complements to habitation and habitat. They are placed according to patterned zonation strategies, and with regard to the availability of water. The patterned social relationships in living structures are developed around selected elements and available microclimates to meet individual needs, and to exploit niches.

Consciously choosing a sequential pattern of priorities allows the design process to flow smoothly.

It is a flexible approach that can be reordered, for instance, where certain elements or features already exist on the site, and present an obstruction around which to design. Other factors that may affect the sequencing of design considerations are included in the list of site characteristics below.

**Site Characteristics
in Descending Order of Permanence**

- Climate
- Landform & Orientation
- Access & Water Harvesting
- Plant Systems
- Microclimate
- Permanent Buildings
- Subdivisional Fences
- Soil

Those characteristics at the upper end of the scale are relatively inert, while those lower yield more readily to change. This graph illustrates what changes are practical to implement and offers a scale to aid in the sequencing of a design.

As a function of reason, sequencing inhabits only one dimension of the permaculture design process. That dimension is intersected, enhanced and buffered by awareness, intuition, and the spiritual and ethical sense that motivated each one of us to consider this philosophy of land use. It is a balanced consciousness, not a recipe, that makes permaculture designs unique and appropriate, and affords them potential.