Zonation: designing your personal ecosystem



Permaculture in Practice

by Nate Downey

Permaculture provides 10 effective "methods of design" that determine a system's components, their appropriate placement and the most beneficial way they will relate to one another.

One of these principles is "zonation," the method of placing all components of a system within one (or more) of six quasi-distinct zones. Picture a pattern of concentric circles, as the waves that radiate from a pebble dropped in a pond. We see this pattern in tree rings, targets, rainbows, solar systems and even poker games (chairs, players, cards, chips, drinks, and, finally, the jackpot) and shopping malls (parking, curbs, sidewalks, landscaping,

exterior walls, business establishments, interior pedestrian routes, and, finally, the food court).

Now picture yourself at your house. This is Zone 0. Here is the place where you put things you need in your immediate vicinity. Some examples are the greenhouse, shadehouses, sunny patios, potted plants and herbs, shade-creating vines, solar panels and graywater-filtration system.

The remaining zones emanate from this center but their shapes will reflect the irregularities of the existing landscape as well as the unique needs, desires, habits and values of a given individual, family or, as in the case of village or community, the general population. Any given zonation strategy will also be imposed upon by the conclusions made by other design methods.

This makes design even more necessary because the simple, predetermined mathematics of concentric rings breaks down immediately as constant factors and variables are taken into account.

Zone 1 is directly outside Zone 0 via the home's most frequently

used doors (especially the kitchen door). Sustainable design dictates that you should place components that you will visit most often (daily or several times per week) in Zone 1. This usually means culinary herbs and other edible plants, well-mulched and often-pruned plants and trees, water-storage systems, compost, cold frames, firewood pile, chicken house, fragrant plants and plant species that attract butterflies and hummingbirds.

Surrounding these components, Zone 2 typically contains localized wind and fire protection, main crop vegetables, small orchards, farm animals, gazebos, small ponds or fountains, view screens, noise abatement, shade trees, the irrigation clock (if needed) and appropriate plant guilds.

In residential, non-farm situations, Zone 3 contains larger erosion-control structures, rainwater-harvesting systems such as on-contour swales and key line systems, large-scale wind and fire protection, hawk poles, "magic spots" for intimate conversation and meditation and wildlife waterers.

Zone 4, which is managed least

intensively, holds harvestable wild berries, nuts and firewood. Visits to this zone occur no more than a few times per season.

Finally, Zone 5 is the natural world from which the only thing we harvest is information. Here we learn about nature's patterns and principles, information we hopefully can apply effectively in Zone 0 through Zone 4. There can even be a Zone 6, which is the area where we let nature have her privacy away from any human infringements.

Zonation is one of the most important design methods in permaculture, especially for beginners because it forces us to save time and energy in our daily lives. Installation errors made early onfor example, placing garden vegetables far away and out of sightcan be expensive to ameliorate. But designs can change easily and often have far-reaching effects.

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