



A permaculture landscape transformation with fruit trees, berry bushes, and culinary herbs. Daily Acts photo

Permaculture

Green Building meets its revolutionary cousin

By SAM RUARK-EASTES

By now, you might have heard of permaculture. The ecological design system has reached the mainstream consciousness with articles in The New York Times and many other publications. It is estimated that more than 50,000 people in the U.S. have taken a 72-

hour permaculture design course.

Permaculture (from “permanent culture”) is a holistic process connecting site design, ecosystem restoration, food and medicine cultivation, home building, urban planning, and social design. It is a movement to guide sound land use and the building of sustainable communities

through the interrelationship of energy, water, soil, plants, animals, and humans.

As Graham Burnett says, “Permaculture is revolution disguised as organic gardening.”

This system, which emerged in Australia and has roots in aboriginal culture, got its inspiration from founders Bill Mollison and David Holmgren,

Permaculture organizations

Western North Carolina is an epicenter for permaculture education, resources, projects, and design professionals. Check out these local permaculture organizations:

- Asheville Institute: www.asheville.org
- Grass to Greens: www.grass2greens.com
- Organic Growers School: www.organicgrowersschool.org
- School of Integrated Living: www.schoolofintegratedliving.org
- Wild Abundance: www.wildabundance.net

who sought to identify a system for ecological living that was modeled after a forest. If you have walked through a permaculture landscape, you have probably seen how it is consciously designed to mimic the patterns and relationships found in nature, while providing an abundance of food, fiber and energy for meeting local needs.

This regenerative system has 12 principles. These principles call us to observe and interact with the natural patterns of a place, design from patterns to details, catch and store energy and water, obtain a yield from the land, receive feedback and apply what you learn, use renewable resources, produce no waste, integrate rather than segregate, use and value diversity, value the edges and margins (in an ecosystem and society), and creatively use and respond to change.

Just as green building helps the building industry evolve codes that encourage better building quality with design and products that minimize environmental impact and save money, permaculture principles and design elements can help evolve green building.

The Green Built NC guidelines include several measures that encourage permaculture. Measures such as the following incorporate these principles:

- Install permanent stormwater controls such as rain gardens, bio-retention basins and/or infiltration strips to reduce storm water impacts.
- Landscape uses native and/or edible plants.
- Drought resistant landscaping.
- Raised garden beds.
- Access to bus routes and bike paths.

- Do not build in the floodplain or within 100 feet of a body of water.
- Greywater systems.
- Composting toilets.
- Rainwater catchment systems.
- Passive solar design.
- Solar electric and solar hot water.
- Use permeable materials for 50 percent of walkways and patios.
- Use permeable materials for driveways (except for required curb cut).

■ Vegetated roof system to reduce impervious surface.

■ Remove existing invasive plant species from the landscape.

■ Preserve existing and plant new trees.

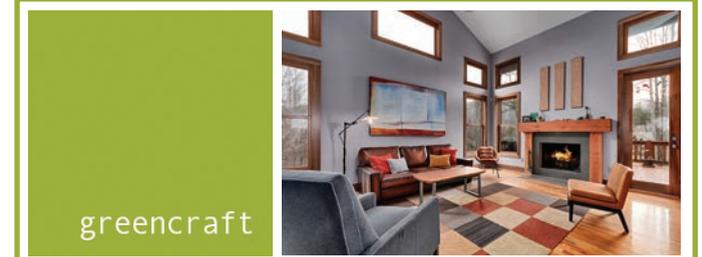
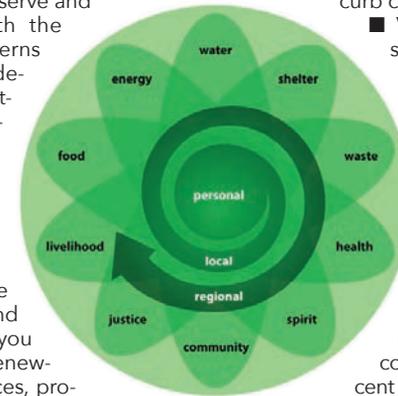
■ If trees are removed during construction, 80 percent of them are milled and used onsite.

Additionally, The Green Gauge program encourages the planting of edible landscapes, walkable community development, and site restoration to minimize stormwater runoff and create raingardens and rich, abundant landscapes that retain water, grow food, create habitat, and provide beauty.

Building codes need to evolve to legalize and encourage things like greywater systems, composting toilets, and some natural building techniques and materials. As more people use these products and systems, the familiarity will increase, precedent will be set, and regulators will get more comfortable seeing them.

If you are searching for a good introduction and overview of permaculture read “Gaia’s Garden” by Toby Hemenway.

Sam is the executive director of the WNCGBC and has been working in the field of sustainability for 18 years with local governments, small businesses and nonprofits. He is a LEED AP and Certified Permaculture Designer.



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