Giving Back to Mother Nature – Self-Sustaining, Regenerative Gardens

by Susie Morrison, Master Gardener

Imagine your garden as a thriving lush space that requires less effort, less maintenance, and less time. There is virtually no weeding, less watering, and minimal pest control. It feeds not only your only family but pollinators, birds and wildlife as well. It is basically self-sustainable and regenerative. The idea for this article was sparked by a book by Stephanie Rose, *The Regenerative Garden*. Additional sources of information on this topic are provided at the end of this report. In these references you can find not only the principles for developing such a garden, but multiple practical projects to attain such a paradise. The key is to look at Mother Nature's methods for growing a garden and supporting wildlife. Then apply those ideas to create your own self-sustaining garden.

The soil needs to be taken back to a more natural state. By amending the soil with natural organic matter, such as aged manure, mulch, green manures (meaning cover crops), and compost, we can develop a self-sustaining soil ecosystem. The soil creatures - micro-organisms, worms, fungi, and such, will naturally move into your garden and maintain the soil ecosystem. More detailed information on soil amendments and ways to incorporate them in our own gardens are provided in the reference materials.

Water is essential for every garden. As our planet is suffering from decreasing fresh water stores, we need to conserve water and protect our water sources. Capturing, storing and using rainwater is one way we can do this. Limiting our water usage to what our plants really need and not over-watering is another way. Teaching our plants to grow roots deeper for water by water less frequently will help our plants be more self-sustaining. Some projects to help us attain water conservation include rain barrels, ollas, rain gardens, wicking beds, and deep watering tubes. References for most these methods are provided at the end of this article.

Choosing the right plants for our garden, including both natives and local plants, will help our gardens thrive. Observing how our plants flourish (or not) gives us feedback on the appropriateness of our plant choices and placement. Interplanting herbs throughout our garden, grouping companion plants together, planting a mixture of plant families and varieties, and intensive planting in our vegetable gardens will increase plant diversity and resilience, as well as help to limit pest control needs. Plant guilds and food forests are concepts worth investigating. Pollinator planting with bee borders is also a beneficial tactic.

Climate and microclimates are important considerations in any garden. Observing the areas in our garden that get more sun, drain quickly or hold water, need more warmth or cooling (shade) is the first step in deciding what plants to include and where to place them in our gardens.

Because we must be stewards of our planet to preserve it for future generations, the ethics of reducing waste as we strive to return our corner of the world back to Mother Nature's plan for regeneration, becomes essential. All are encouraged all to reduce waste, and maximize and repurpose the use of our purchases. We must value our relationship to nature and garden in a way to protect and promote all creatures however small that are part of the ecosystem of our gardens.

And last, we can share our gardening knowledge and experience with people in our community as well as share the end products of our labors by sharing produce and flowers. We should "spread joy, health, safety, and pride" with your community.

Reference: Stephanie Rose, *The Regenerative Garden, 80 Practical Projects for Creating a Self-sustaining Garden*, (Ecosystem, 2022)

Additional Information:
"What's the Story with this New Term, Regenerative?", https://extension.psu.edu/whats-the-story-with-this-new-term-regenerative

"Regenerative Gardening: Growing food successfully & sustainably in a changing climate", https://extension.umd.edu/sites/extension.umd.edu/files/2021-02/Regenerative%20Gardening%20MG%20Sara%20Via%20Resources.pdf

Think Like an Ecosystem: An Introduction to Permaculture, Water Systems, Soil Science and Landscape, by Amelie des Plantes

The Regenerative Grower's Guide to Garden Amendments: Using Locally Sourced Materials to Make Mineral and Biological Extracts and Ferments, by Nigel Palmer

Regenerative Garden Beginners Guide: A Lead Way to Healthy Soil for Healthy Food, by Mary Olu

Rain Barrels: "Rain Barrels Make Good Sense," https://www.uthort.com/wp-content/uploads/2021/06/Rain-Barrell-W276.pdf

Ollas: "Irrigating with Ollas," https://extension.arizona.edu/irrigating-ollas

Rain Gardens: "Tennessee Native Rain Garden Plant Recommendations," https://tnyards.utk.edu/wp-content/uploads/sites/170/2022/03/Tennessee-Rain-Garden-Plant-Recommendations-1.pdf

"Building a Rain Garden," https://extension.umn.edu/landscape-design/rain-gardens

Wicking Beds: "What as a Wicking Bed – DIY Wicking Bed Ideas for Gardeners." https://www.gardeningknowhow.com/garden-how-to/design/lideas/how-to-make-a-wicking-bed.htm

If you have a question for the Master Gardeners, submit them to us on our website at www.netmga.net. Click the link at the top of the page, "ASK A MASTER GARDENER" to send in your question. Questions that are not answered in this column will receive a response from a Master Gardener to the contact information you provide.

The Master Gardener Program is offered by the University of Tennessee Extension. The purpose of the Master Gardener program is to train people as horticultural-educated volunteers. These volunteers work in partnership with the local Extension office in their counties to expand educational outreach, providing home gardeners with researched-based information.