

## **Green Landscaping: Bringing Native Beauty Back to the Upstate**

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There are two places, currently under construction, that I drive past at least twice a day. In a previous incarnation, one was a field, thick with a tangle of high grasses, interspersed with summer wildflowers and sweet pea vines. The other was several acres of woods, serving to screen this passing motorist from the twinkling lights of retail on Haywood Road. On one morning ride to school, my children noticed a change, and said, "look at all that red dirt, mom...what happened to the pretty field?" Later that week, I noted that many of the trees on the other site's hilly acreage had been removed, and a huge sign announced the coming of a subdivision.

Soon, the builders of these new construction sites will be diligently working to recreate a landscape they cleared only months before. What will be the result? Too often, it includes the prerequisite unnaturally green lawn, a shade tree or two, and a ring of evergreen shrubs. But even adding several clumps of technicolor annuals as an extra touch fails to relieve what garden writer Tom Christopher observes as, "our talent for reducing a continent's stupendous diversity down to a safe, bland norm." He believes we're in danger of turning American cities and suburbs into "a processed landscape in which to eat our processed cheese."

Bland suburbia is a far cry from our area's original landscape. Much of Greenville and the surrounding region was grassy prairie before the arrival of the European settlers. Native Americans hunted herds of buffalo across fields they created by burning sections of virgin forest. The resulting open areas were populated by native grasses with vivid, poetic names like bluestem, purpletop and love grass.

Today's lawns, open areas, and recreational spaces are more commonly filled with exotic, imported species like Bermuda or fescue and non-native trees and shrubs. These non-native plants take more resources to maintain. In fact, the EPA has found that the upkeep of an average 1-acre lawn costs \$700 and requires 40 hours of labor each year. For residents of the drought-plagued Upstate, the cost of water and fertilizer in stress conditions can be even higher.

What we do with our yards and public green spaces affects our neighbors and the environment. The EPA reports, "The average homeowner over-applies pesticides and fertilizers, often at rates many times that of farmers. Most people dump excess pesticides on the ground, in drains, and in the trash rather than taking them to hazardous waste collection sites. Tens of millions of gallons of gasoline are spilled each year while refueling garden equipment."

Emissions from landscaping equipment (mowers, blowers, trimmers, etc.) are usually much greater than that of a car per hour of operation. They also contribute to noise pollution year round. The drone of leaf blowers is ubiquitous in both the commercial and residential landscape. The consumption of natural resources such as fuel, water, and soil

erosion, round out the stress. Thirty percent of water consumption in urban areas in the eastern United States is used for watering lawns.

Fortunately there are solutions to counteract the depletion of natural resources. As Greenville quietly moves toward Brownfield development, LEED-certified architecture and other sustainable forms of urban construction and restoration, it's also moving toward "green" landscaping. The South Carolina Native Plant Society offers lectures, symposiums and field trips in effort to educate the community about the bounty of indigenous plants. Earth Design, a firm in Pickens, specializes in landscape restoration using native plants modeled on natural communities. The City's Parks Department is also at work to utilize lower impact maintenance techniques and native species. Upstate Forever is the grassroots, non-profit organization whose primary goal is to promote sensible growth and protect special places.

Rick Huffman, President of the South Carolina Native Plant Society, and a landscape architect with Earth Design, has been called in to consult on many of Greenville County's greening projects. They include the expansive restoration of historic Reedy River Falls Park, landscaping for the new and planned Greenville County schools, and eco-friendly refurbishment of places like the Rosewood House of Recovery.

Little improvements can make big differences. When asked what the simplest and most important change any landscaper could incorporate, whether it be in a tiny backyard or large, public space, he put a strong emphasis on native and indigenous plants. "Selecting plant materials that can hold up to drought and thrive in our clay soil lowers maintenance. These plants may even be more resistant to pests," he advises.

The entire American landscape falls prey to a declining biodiversity with the introduction of invasive plants into the landscape. Big box retailers frequently peddle the same palette of 'one-size-fits-all' plants that lessen a garden's diversity. Even worse, when these non-native species escape from our gardens and take over natural areas they choke out the wide variety of native plants on which wildlife depends. One very familiar example is the non-native Kudzu on the sides of our highways, choking even the telephone poles.

Native plants are defined as plants found in a particular area before Europeans settled, commenced extensive land clearing, and introduced exotic plants. Thousands of plants fall into this native category. Many are very beautiful, and are underused in the landscape. Indigenous species have evolved to take a central place in our ecosystem. Other plants, animals, and insects may require them for habitat or nutrients during all or parts of their life cycles. When natural areas are lost, damaged or divided, what is left becomes all the more critical for the survival of many. By using native plants in our urban landscaping, we can help offset these losses.

Huffman says that many SC native species are widely available at local nurseries and home improvement centers. He chuckles, "you can't just ask for a native though, most garden center employees don't even know they carry them." He cites the recently

published book “Wildflowers of South Carolina,” by Porcher and Rayner, as a definitive resource for anyone interested in bringing back the original beauty and diversity of our area. Additionally, websites like <http://cricket.biol.sc.edu/herb/> lists approximately 3000 plant species in the Atlas, with a county dot map for each.

Of course, not every native plant will thrive in every location. Huffman advises looking at the plants and their respective communities in their natural settings before deciding what to put where. He stresses the importance of knowing your site conditions and the requirements of the native plants when making selections. “Most people look at our dry weather, heat and clay soil as problems to be overcome. Working with natives allows you to see the obstacles as assets, just right for making plants thrive.” He points out that there is no quick way to master landscaping with natives. Just like all gardening, “it takes time and experience, trial and error.”

Paul Ellis, Administrator of the City’s Parks and Recreation Department notes that the use of natives will be an integral part of the Reedy River Falls Park master plan. “We will be using native trees, especially shade trees where necessary. Most of the heavily planted areas will be in annual and perennial flowers with foliage shrubs. As you leave the ‘WOW Zone’ we will have more of a park like setting where natives will be mixed with some non-native shrubs.” He stresses that while there are challenges, such as limited selection and availability of a variety of native plants other than trees, he thinks that will change in the near future as natives get more use and exposure.

Huffman points to the viability of using natives and waste water management in community projects. “There is one school in Spartanburg that has been landscaped with about 4,000 natives. As the plants grow, change, and attract a variety of wildlife, teachers can use this outdoor classroom to implement studies of nature, math and a variety of subjects.” He also notes that the work being completed at Rosewood House of Recovery not only uses about 98% indigenous plants, but also incorporates an underground tank to collect “gray water,” that being waste from clothes washing, bathing or the bathroom sink, and a dry stream bed.

The water issue is one of great importance to Greenville. The media warned all summer that we had a problem. Huffman believes, “While we are still on a learning curve, things like taking gray water and diverting it to a storage system or existing irrigation system could help tremendously.” Reducing the size of the lawn space would also conserve water. “Grassy areas don’t have to be eliminated. Just use them as a ribbon to connect things like larger plant beds.”

Driving through one identical residential and commercial space after another, it is easy to see how homogenized most of our landscape has become. The use of native grasses for instance, that thrive on eroded, worn-out fields, can bring back an important part of the state’s natural history and help restore areas disturbed in construction. By using some imagination, a healthy dose of native plants and sustainable methods of maintenance, we can regain some of the original beauty that is unique to our area.

**TREES**

American Dogwood  
Sourwood  
Red Maple  
All varieties of Oak  
Fringe Tree  
American Holly

Wild Geranium

**Ferns**

Southern Shield  
Christmas Fern  
Cinnamon Fern  
Lady Fern

**SHRUBS**

deciduous Azalea  
Hypericum (St. Johnswort)  
Clethra (sweet pepper)  
Virginia Sweetspire  
Eastern Red Cedar  
Oak Leaf Hydrangea  
Beautyberry

**GRASSES**

**Meadow Grasses -- not for use in a lawn  
include:**

Indian Grass  
Bluestem  
Muhlenbergia  
Panicum (Switch Grass)

**Woodland area grass:**

Chasminthium (Northern Sea Oat Grass)

**Lawn Grass**

Danthonia (Silky Oat Grass)

**PERENNIALS****Sun**

Echinacea Purpurea (Purple Coneflower)  
Rudbeckia (Black-eyed Susan)  
Aster  
Coreopsis  
Phlox  
Gaura  
Stokes Aster  
Joe Pye Weed

**Shade**

Foamflower  
Wild Ginger  
Trillium  
Woodland Phlox  
Spiderwort