



Over the Garden Gate

Published by the Hall County Master Gardeners

President's Corner

by Patti Lewis

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Cherokee Bluffs Park and the Roberts' Cabin

Cherokee Bluffs Park, 5867 Blackjack Road in Flowery Branch, is a 168-acre park with streams, meadows, rock outcroppings and abundant wildlife. Some locals refer to the rocks as "Stone Mountain's toenails".

Amenities include an amphitheater with power, water, and restrooms; bike and hiking trails; a lodge with a kitchen and meeting rooms; paved parking; a covered pavilion; a picnic area with a grill; and a 3-acre, stocked lake. A history room houses photos, artifacts, family archives, and replica clothing.

Cherokee Bluffs Park is home to the oldest structure in Hall County, the Roberts-Orr Cabin, which dates back to the early 1800s and stood at the intersection of Hog Mountain and Wade Orr roads. For several decades, it was the subject of preservation efforts with the cabin being stored in a trailer for over twelve years. Reconstruction was completed earlier this year. Judging by the hundreds of rings on the stored logs, the conclusion was reached that "These trees were growing before Columbus discovered America."

The Friendship Community's pioneers got their mail and provisions at this cabin. Colonel James Roberts, a Civil War militia officer, lived there and signed up soldiers for the war.

Recently, HCMG and Parks & Leisure reached an agreement about the Cherokee Bluffs Park. HCMG will research, design, and install period landscaping for the Roberts Cabin. We will perform light pruning and maintenance.



Parks & Leisure will provide funding for the project, build a split-rail fence, install a water source, plant designated trees, mow, mulch, and do the pruning of trees. Parks and Leisure will allow the use of its facilities, including the Chicopee Woods Agricultural Center Arena and Exhibit Hall,

without charge in exchange for our work at the Roberts Cabin. The success of this venture could lead to additional joint projects in the future.

This project merges horticultural education with history. By using native plants, visitors will be reminded of the beauty of the native environment.

Please visit the park. Scrutinize your schedule and determine if you might be able to work on this project. We need for our Master Gardeners to step out of their usual volunteer routine and give this one a try so that we can fulfill our end of the bargain with Parks and Leisure. It saves us \$2200 per year. Come on! You might just like it!



Write for Us!

Like to write? Have something to say? Your fellow master gardeners want to hear from you! Email Rick at rsfreeland@charter.net for details.

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Please submit your ideas, news, comments and questions to rsfreeland@charter.net

Newsletter contributors:

Patti Lewis; Hugo Kollmer; Marcia Tague; Rick Freeland

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As with many historical sites, there is a story about the name. The Cherokee Indians lived in this area. A Cherokee family was fleeing members of another band who wanted the land. The family grew weary. After hiding his family in the woods, the patriarch raised a ruckus, drawing the attackers to him. He was surrounded on top of the bluffs, jumping off rather than being taken prisoner.

The Bluffs were shelter for travelers, hunters, and settlers. The Mississippi Mound Builders, Creek Indians, and then the Cherokee Indians lived here. European pioneers arrived soon after the Revolutionary War. Then, the Cherokees lost the land because gold was discovered.

We often hear and read of humans apprehended crossing our country's borders, but seldom mentioned are efforts being made to prevent entry of harmful insects, plants and plant diseases. Charged with this monumental task are specially trained members of the U.S. Customs & Border Patrol, stationed at all ports of entry, diligently searching travelers' possessions and an immense range of imported products and their packaging, while also scrutinizing, imported wildlife and various forms of contraband transported by land and sea.

A concern to Master Gardeners, familiar with and often faced with attempting to control them, are several non-native insects such as; Japanese beetles, Mexican bean beetles, and kudzu beetles. However, the magnitude and extent of border protection may not be generally comprehended.

Around the end of 18th and beginning of the 19th century, no provisions had been established for intervention at our borders and little thought given to the importation of potentially harmful insects, plant pathogens, animals, and aquatic species. During this period some of our most infamous and devastating invasive species "jumped ship", including:

- The Boll Weevil (*Anthonomus granolas*) from Mexico.

- Dutch elm disease (*sac fungi*) carried by the Elm bark beetles, from Asia).

- The Japanese beetle (*Popilla japonica*), from Japan.

- The American Chestnut Blight (*Cryphonatrix parasitica*), also affecting the American Chinquapin, perhaps had the most devastating impact to our country's economy. Within a decade, following its arrival from Japan, it killed 4 billion chestnut trees, highly prized for lumber as well the production of nuts (mast), consumed by humans, livestock and wildlife.



Today, a century of more since their introduction, these pests, remain unconquered. Despite vastly stepped up vigilance and strict enforcement, we are continually challenged at our borders. Just a few pest, which successfully entering our country recently include:

- The European oak borer (*Agilus sulcicollis*), whose presence was first discovered in New York and Michigan 2009. Few if any oaks of the *Quercus* species survive the girdling caused by this insect. However, its economic impact has not yet been assessed.

The Asian Longhorned Beetle (*Anoplophora glabripennis*), affecting several of our native tree species, was found in 1996. It is believed to have entered the U.S. concealed in wood packing from China.



- The Kudzu beetle (*Megacopta cribraria*), native to India and China and discovered in California in 2004, becoming a major threat to our nation's soybean production

- The Mediterranean pine engraver (*Orthotomicus erosus*), a 3/16 inch long beetle, whose hosts include a wide range of the *Pinus* species, is native to parts of Europe, the Mid-

dle East, northern Africa and China

- Scourge of citrus growers, the Mediterranean fly (*Ceratitis capata* [Wiedmann]). More than once thought to have been eradicated, it returned to California in 2009 and subsequently found in Texas and Florida. Vast sums are being spent in continuing efforts to exterminate this pest.

- Native to Asia, the Emerald Ash Borer (*Agilius planipennis*), Responsible for the destruction of tens of millions of our native ash trees, it was first discovered in 2002 hidden in imported wood packing materials.



What the Heck?

Botrytis

A fungus that forms a gray, powdery mold on plants, usually when warm weather follows a period of cool, damp weather.

In the acre next to your home there is an undisturbed native ecosystem. It contains a small creek and numerous oaks, maples, sunflowers, milkweeds, goldenrods, ferns...all of which subsidize a vibrant population of local birds, vocal frogs, lizards, toads, lightning bugs, etc.

One morning you hear the rumble of heavy machinery next door. In a matter of a few hours bulldozers have leveled the trees, rerouted the creek through concrete pipes, and scraped the ground clear of long-standing vegetation.

Introducing: **Biological Castration.**

Biological diversity was destroyed. The food web was destroyed. There are specialized relationships between insects and plants; insects eat and lay their eggs on only certain plants. Once those plants are gone, so are those insects.

The next consequence is that the species, usually birds, that rely on those insects for food also leave to look for food elsewhere.

It is likely that after a new house is built on that acre, most of the ground will be covered with a sterile green lawn, and non-native trees and shrubs from China and Japan. Eventually you might notice fewer birds in the area, fewer butterflies even though your own landscape might contain native plants that support some biological diversity.



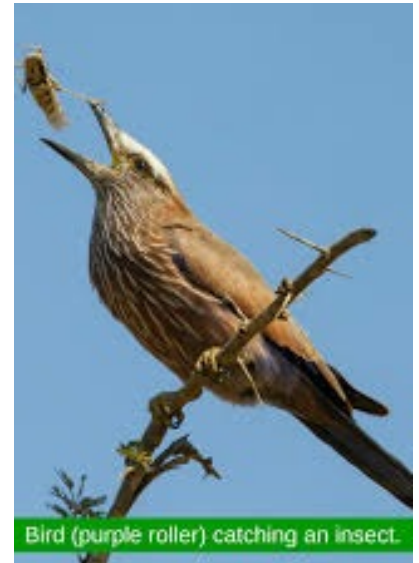
But we have created habitat fragments which are disconnected ecological areas like parks and nature preserves that support a limited selection of biological diversity. These fragments are surrounded by 3300 species of invaders that have been introduced from other continents.

The next step is to join these existing fragments of diversity with corridors of native plants so that the wildlife population has an enlarged food web.

For example, Carolina chickadees are usually seed and berry eaters. But when they are feeding their young, chickadees become avid caterpillar hunters as do most birds.

Caterpillars are soft, easy for young birds to eat. It's a lot less work to grab a few sedate caterpillars than chase down hundreds of insects for one meal. And most important, caterpillars contain most of the nutrients that young chickadees need. Without caterpillars (or hundreds of captured insects), no baby birds will survive.

To have caterpillars, you need the host plants that insects prefer to lay eggs on. Diversity in the food chain creates biological stability.



Bird (purple roller) catching an insect.

Many insects specialize on only certain species of plants. Food webs can be rebuilt by planting what insects need. One major contributor to the food web is the mighty oak. Oaks support hundreds of species of insects and caterpillars.

As gardeners, we are on the front line for educating the public about the critical need for using native plants in their landscapes. Biological diversity is necessary for animal survival and that includes guess who?...you and me.

Ref: Doug Tallamy's speech in May 2017

Placing mulch around landscape plants contributes to their overall health and greatly increases their chances for survival. To get the most benefit from mulch, however, you need to apply it correctly, and maintain it for the long term.

Correctly Applying Mulch in the Landscape

In an article in the September 2009 edition of *Total Landscape Care* titled "Getting the Most From Mulching - Do You Mulch Too Much?", Cindy Ratcliff explains that like too much of anything, going overboard on the mulch can be bad for plants.

Ms. Ratcliff says that gardeners should apply mulch to a depth no greater than 2" to 4". When mulching around newly planted trees, leave a 3" to 4" space between the mulch and the trees' trunks. Leave an 8" spacing for mature trees.

The thickness of the mulch you apply will depend on your plant's moisture needs and soil drainage abilities. For permeable soils, 2" to 4" of mulch is plenty. As the soil becomes more impermeable, decrease the mulch depth. Permanently waterlogged soils may need no mulch at all.

Mulch Volcanoes Blow!

Avoid creating what the International Society of Arboriculture terms the "mulch volcano", where mulch is piled high and thick on the base of a tree. Mulch volcanoes can create an environment for disaster. They may encourage the growth of adventitious roots, where the roots grow out from the plant's stem and into the mulch itself. When the mulch is removed, roots are left exposed to the elements.

Mulch piled high around plants can contribute to root suffocation and dehydration, and may also become transfer vectors for fungal growths, pathogens, insects and animal pests.

Mulch volcanoes live up to their name. Decomposition causes them to heat up, generating temperatures up to 140 degrees Fahrenheit. Soon, all that remains is a dead tree erupting from a mulch volcano.



Maintaining Mulch in the Landscape

After some time in the elements, mulch deteriorates. Top dress planting beds with fresh mulch either annually, or when the mulch has decomposed or compacted to a depth of 1" or less. Keep it confined within the planting beds by digging in a foot edge, or installing more permanent edging.

Some mulches, like pine bark, are notorious for floating away in runoff from heavy rain. Use shredded hardwood in areas subject to inundation, like rain gardens, or on sloped areas where rainfall may sheet flow in high volumes. Avoid using organic mulch in swales or areas of concentrated runoff. Instead, substitute an inorganic material such as river stone or lava rock. Other options: create a dry stream bed, or use a ground cover plant suitable for erosion control.

Mulches are inexpensive insurance. Installed correctly and maintained diligently, mulches will provide protection from the elements for your valuable plants for years.

Ten Ways Mulch Will Benefit Your Garden

Why bother with mulch? What possible benefits are there in using the stuff?

Insulation - Keeps roots cool, controls soil temperature fluctuations, lessens time to seed germination.

Moisture Retention - Retains soil moisture, decreasing the need for frequent watering, preserving water and making it more available to plants during hot months.

Beautification - Ties planting masses together and add to the beauty and harmony of a landscape.

Define Boundaries - Create defined edges between the lawn and planted areas.

Discourage Weeds - Place a layer of newspaper on the ground, set the plants, and top dress with 2" to 4" of mulch to defeat most weeds.

Camouflage - Mulch can hide drip irrigation lines, valve boxes and other landscape utilities.

Build Soil - Decomposing mulch adds soil nutrients while improving the ability of the soil to transfer moisture to the plants and percolate excess water.

Unify Planting Beds - Mulch can tie together planting beds or individual trees scattered throughout a turf area.

Protect Plants - Creating a mulched bed that extends several inches wider than the planted area provides a buffer to protect plants from over-zealous landscape crews. This works especially well if an edge element (like commercial steel edging, brick or a foot edge) is installed to keep the mulch in bounds.

Erosion Protection - A layer of mulch can cushion planted areas, roots and soil from foot traffic, and negate the force of falling raindrops to decrease the chance of erosion.