



Extension Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

Fall 2011

Empowering
gardeners.
Providing
garden
solutions.

Analyzing the Home Lawn

Lawns are considered beneficial to our lives in a variety of ways. They add beauty and value to our homes as well as serve as green spaces within our neighborhoods. Throughout North Carolina for the past few years, we have been dealing with consistent drought in most of our home landscapes. In addition to reduced rainfall, we have also been experiencing above normal temperatures.

Not all types of grasses are suited for every region of North Carolina. The type of turf you have planted in your landscape will determine if additional steps should be taken to ensure your lawn can survive these extended hot dry periods. High temperatures cause cool-season grasses such as tall fescue to be heavily stressed, causing an increased energy toll on the plant. Heat alone is generally not a problem with warm-season turfgrasses unless heat occurs with low soil moisture.

NC State University specialists recommend applying approximately 1 inch of water per week from irrigation or rainfall to turf throughout warm dry months to keep turf green and growing. You can fine-tune the application by not watering again until you see turf turning bluish-gray in the heat of the day. Irrigate early in the morning to reduce water loss due to evaporation.

If your goal is to keep the turf crowns hydrated but to allow the turf to go dormant with minimal irrigation, then use ½-inch of water every two to four weeks. This amount will not keep the turf green, but it will increase its chance of survival. Avoid herbicides and fertilizers until normal rainfall resumes.

If you have not been irrigating your lawn through the dry periods this summer, the turf will likely be severely thinned due to drought stress. Consider fall lawn renovation of cool-season lawns now.

If you have a warm-season grass, such as zoysiagrass, bermudagrass, centipedegrass or St. Augustinegrass, your lawn may be able to handle dry conditions better in terms of survival. But it may still be severely damaged from chronic drought. Once temperatures begin to subside this fall, you may begin to see some recovery.

The time to renovate warm-season grasses is normally in spring and summer. Warm-season grasses should not be seeded in the fall as there is inadequate time for maturity before the first expected frost. You may consider installing warm-season grass sod this fall, although it may be more susceptible to winterkill. For more information on lawns and lawn renovation, contact your county Extension center.

— Diane Turner

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St. Augustinegrass
www.turffiles.ncsu.edu



Turfgrass display
New Hanover County



Fine fescue
www.turffiles.ncsu.edu

Upcoming Events

Sept. 6 (6 PM), **Four Season Vegetable Garden**

Sept. 20 (6 PM), **Fall Lawn Care**

Oct. 4 (6 PM), **Landscaping on a Slope**

Oct. 18 (6 PM), **Easy Care Perennials**

Nov. 15 (6 PM), **Growing and Pruning Apple Trees**

Historic Bethabara Park, 2147 Bethabara Road, Winston Salem
• (336)703.2868

Sept. 8 (12 noon), **Drought Tolerant Perennials**

Oct. 20 (12 noon), **Spring Flowering Bulbs**

Nov. 17 (12 noon), **Preparing Your Garden for Winter**

Frank L. Horton Center, 924 S. Main Street, Winston Salem
• (336)703.2868

Sept. 18 (2:30 – 3:30 PM), **Revitalizing Your Lawn This Fall**

Oct. 16 (2:30 – 3:30 PM), **Spring Bulbs**

Nov. 13 (2:30 – 3:30 PM), **Great Urban Trees for Durham**

South Regional Library, 4505 South Alston Ave., Durham
• (919)560.7409

Sept. 20 (6:30 – 8 PM), **Latest Trends in Gardening**

Oct. 23 (2 – 4 PM), **Durham Gardening for Yankees**

Sarah P. Duke Gardens, 420 Anderson Street, Durham
• (919) 668-1707

Sept. 7 (3 – 4:30 PM) **Growing Herbs**

Walkertown Branch Library, 2969 Main Street, Walkertown
• (336)703.2868

Sept. 23 – 24

Anson County Ag Expo Fair

Lockhart Taylor Center, Wadesboro
• (704)694.2415

Smart Gardening — Managing trees in the landscape

No matter how much you love trees, remember they don't love you back. Trees may be very beautiful and benevolent, and save you lots of cash on your cooling bill, but they don't last forever. Trees near your home should be taken down when they become dangerous, which may occur years before they would naturally die. And any monetary savings on your cooling bill become meaningless if you are constantly paying for tree removal. Manage this expense three ways.

First, when building, do not save any trees within 30 ft of the new construction. In the area between 30 ft and 60 ft from the building's footprint, you should save only a few selected healthy trees. These trees should have most of their productive life in front of them. Too often, new homeowners save old patriarch trees that have one foot in the grave and the other on a banana peel. It is much cheaper to take old trees down before construction. And it is much smarter to save a middle-aged tree with the potential to grow. If you are not sure about the safety or

lifespan of a tree, certified arborists have the experience to help you make a smart decision.

Second, make sure you don't plant trees too close to the house. There is no way the average homeowner can just look at a slender little sapling and place it far enough away from the house. Even professionals can get it wrong. Use a good reference to look up the canopy size for the particular tree you are planting. Then use a measuring tape and believe what it tells you.

Third, don't overload your yard with young saplings. While they may look beautiful when they are young, eventually they will shade out the entire yard and compete with each other. Place a young tree on the southwest corner of the house for shade from the hot afternoon sun and maybe a few more trees for looks. Leave some areas for sun to get to the ground. If you don't, in a few years you will not be able to grow grass, fruit, vegetables or any other plant that needs sun, while you sit around waiting for a huge removal bill to become due.

– David Goforth

Food Production — Fall is for cole crops

The cole crops, or members of the cabbage family, are ideally suited for growing and maturing in the fall when temperatures begin to cool. These crops will be of the highest quality in the fall.

Try to find transplants of cabbage, broccoli, cauliflower, Brussels sprouts, kale or collards to plant in the garden, preferably between early to mid August. This will give the plants enough time to mature before a frost. They can tolerate temperatures down to 26°F without dying, but daily growth of these plants will be reduced at temperatures below 32°F. Plan to harvest them when temperatures stay around freezing.

Harvest cabbage when the heads are firm and broccoli when the green florets are still tight, before they open up and form yellow flowers that will taste bitter. Cauliflower should be harvested when the heads are about 6 inches in diameter and tight, before loosening up and

becoming “ricey.” Keep the heads white. To keep sunlight from turning them yellow, tie the outer wrapper leaves into the center of the plant with string to shade the developing heads when they reach golf-ball size.



USDA-ARS

When you see small white and yellow butterflies hovering around cole crops, spray with *Bacillus thuringiensis* (sold as BT) to prevent damage by imported cabbageworm and cabbage looper larvae that will chew holes in the leaves. BT is safe to use and made from naturally occurring bacteria found in the gut of these caterpillars, which makes them stop feeding when ingested and dehydrates them.

Once temperatures stay in the 30s (°F) and if Brussels sprouts are not enlarging fast enough, pinch out the top of each plant to force the plant to channel energy into the sprouts, causing them to quickly enlarge before frost.

– Carl Cantaluppi

Garden Spot — DeHart Botanical Garden

If you are looking for beautiful natural views of North Carolina, including native plants, scenic hiking trails and picturesque picnic spots, visit DeHart Botanical Garden in Franklin County. Located 5 miles south of Louisburg on US-401, DeHart Botanical Garden is an 88-acre privately owned land conservancy free for the public to experience and enjoy.

Features of the garden include a bamboo forest, a large pond with picnic areas, an old homestead, large rock formations, four 1.8 mile trails varying in difficulty (including a scenic waterfall trail), several named plants to view and learn about, and guided tours if scheduled in advance. Not only is this garden a wonderful place to discover North Carolina's beauty in Franklin County, it is also a nature conservation reserve containing a wide variety of native species.

The entrance to the garden is a gated parking lot consisting of a gazebo with maps and interesting facts about the conservancy. Visitors must sign in at the gazebo and follow the rules of the garden to maintain its beauty and safety. The



The 88-acre DeHart Botanical Garden near Louisburg offers beautiful vistas, scenic trails and picturesque picnic spots.

©Kim Jackson

Botanical Garden is free for public use, but you need to schedule the garden if you would like to use it for functions such as weddings, concerts, church gatherings, parties and school photos. To schedule a tour or event, contact Allen DeHart at (919)496.4771.

References

<http://voices.yahoo.com/de-hart-botanical-gardens-louisburg-4141683.html?cat=5>
<http://www.wral.com/lifestyles/travel/story/9837066/>
<http://www.ourstate.com/allen-de-hart-backyard-garden>
<http://www.examiner.com/retirement-living-in-raleigh/do-lunch-at-the-dehart-botanical-gardens>

— Kim Jackson

Environmental Stewardship — Vermicomposting

Everywhere I turn, I see people wanting to recycle. Recycle aluminum. Recycle plastic. Recycle paper. Here is a way to let worms recycle kitchen scraps. Worms can turn most kitchen scraps into a wonderful black soil in just a matter of weeks. They eat any type of fruit or vegetable scrap, even the ones that got soft in the fridge. They even eat coffee grounds with the filter! This type of composting using worms is called **vermicomposting**, and the process can be contained in a worm bin.

Red wiggler worms (*Eisenia foetida*) are the most common type used in worm bins. They devour large amounts of organic matter, and the worm castings are very high in nutrients that can be used to feed plants both inside the house and outside in the garden.

Worms produce no odor if the right ingredients are put in the bin and the wrong ingredients are kept out of it. No odor means

the worm bin can be kept inside for year-round use. Under the kitchen sink or in the garage are good places for a worm bin. Worms won't eat meat scraps, bones, oils or salad that has been coated in dressing. These items will need to be put into the trash.

Worm bins can be purchased commercially or they can be homemade. Making and caring for a worm bin is a great project to do with children.

An extra benefit is that some of the worms can be used for other activities such as fishing.

For more information on letting worms eat your kitchen scraps, pick up a copy of Cooperative Extension's publication *Worms Can Recycle Your Garbage* (AG 473-18), and start reducing the load on our landfills a little at a time: http://www.bae.ncsu.edu/programs/extension/publicat/wqwm/ebae202_94.html

— Shawn Banks

Tips & Tasks

Lawns

- Fall is the time to control certain broadleaf weeds in the lawn, including chickweed, white clover, dandelion, wild onion, plantain and Canada thistle.

Ornamentals

- Cut down stems and foliage of herbaceous perennials when the leaves begin to brown.
- Cut back perennial herbs to encourage well-branched growth next year.
- Fall is the best time of the year to plant trees and shrubs. Start planning now if you're likely to add shrubs and trees to your landscape. Always think about selecting the right plant for the right place. Pay attention to the soil type, soil moisture and sun/shade conditions that the particular plant you're considering needs. Also consider the physical space the plant requires!
- Damage from caterpillars feeding on trees and shrubs in late summer is not a problem. No treatment is needed because the leaves of trees and shrubs have been used by the plant to manufacture the food reserves needed to sustain plant growth through dormancy and the early growth period of the following spring.
- Plant a bulb on its side if you're unsure which side is top and which is the bottom. The stem will always grow upright.
- Maintain the optimum mulch layer of 2–3 inches in depth. Too much mulch can cause more trouble than too little.

— Scott Ewers



Showstopper — Japanese plum yew

Southern gardeners have long dreamed of growing the common yew in their landscape. Unfortunately, yews don't like hot, humid weather. If you desire an evergreen shrub with conifer-like foliage, then look no further than the Japanese plum yew (*Cephalotaxus harringtonia*). It makes a fine specimen plant and can also be used in groupings or mass plantings. It tolerates a range of soils and needs little maintenance. Locate in shade or partial shade, though well-established plants will grow successfully in full sun.

The only negative about the Japanese plum yew is its slow growth rate. 'Prostrata' is a low-growing cultivar that grows 2 to 3 feet tall and 3 feet wide. Many experts agree that the landscape potential for plum yews in the Southeast has not been tapped. Best of all, they are deer-resistant and hardy in zones 6 – 9.

— John Vining

Edibles — Giant pumpkins

Giant pumpkins require more attention than regular ones, but it is possible to grow a whopper in North Carolina. The current state record is 1,258 lbs! To be successful, you'll need the right location, seed and a little luck. Giant pumpkins grow best in the mountains. Respectable specimens are possible in the piedmont. In the coastal plain, consider gourds or watermelons instead. Not all varieties grow to giant stature; some growers prefer 'Atlantic Giant'. Giants have the same nutrient needs and pest issues as regular pumpkins but need special care. Daily watering and plenty of space are critical; a vigorous vine can cover 2,500 sq ft. Growers manage the vines by thinning and positioning fruits to achieve optimum size. There are several associations dedicated to growing giant pumpkins. Find a group for insiders' tips, and try your hand at growing a giant.

—Lisa Rayburn

Pest Alert — *Rhizoctonia solani*

This fungus causes brown patch on cool-season turf and large patch on warm-season grasses. **Brown patch** is characterized by brown or tan patches of diseased turf from 2 inches to 3 feet wide. Symptom development varies with mowing height. Turf maintained above 1 inch shows irregular silver-gray or tan lesions with a thin dark-brown border. Turf below 1 inch high shows no distinct lesions but general leaf necrosis. All tillers typically are not damaged within a developing patch. Affected turf may recover under reduced disease pressure. Poor air movement, poor soil drainage and excessive shade are more conducive to disease development. Excess nitrogen can also increase disease pressure.

Large patch occurs during spring and fall when warm-season turfgrasses are entering or exiting dormancy. Circular patches ranging from less than 3 feet to 26 feet wide characterize the disease. Symptoms are visible on the leaf sheaths, where water-soaked, reddish-brown or black lesions result in foliar dieback. Excessive soil moisture, thatch and lower turf canopy encourage disease development. Poor drainage, shade, restricted air movement or excessive irrigation will increase severity.

Minimizing environmental factors via cultural methods and using a good spray program are the best ways to manage this fungus. For more information, contact your county Extension center.

— Kim Jackson

Sustainability

Tree Grouping

Trees are often planted as individual specimens but can be group-planted closer than standard recommendations. A group can be mulched together to eliminate competition from lawns and reduce turf maintenance. Even large trees can thrive with 20 feet between them. Groupings that create "pocket forests" with large, medium and small trees, shrubs and groundcovers create an environment with cool soil and uniform moisture that is more favorable to tree health than the environment around single trees. Groups of trees withstand wind loads better than a single tree. Grouping creates an area where mowers aren't used, which protects stems and roots from injury. Even leaf removal is easier: Let the leaves serve as mulch, and keep the nutrient cycle intact. Work with nature by imitating it.

— Danny Lauderdale

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Giant pumpkin grown by Wallace Simmons

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