



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 1/2-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. 1 – 22, Thursdays, 12 noon – 2 PM

Eat Smart, Cook Smart

Caldwell County Extension Center, Lenoir

• Debbie Cox: (828)757.1257

Sept. 8, 2 – 4 PM

Season Extension, Saving Seeds and Cover Crops

Marshall

• Elizabeth Ayers: (828)649.2411

Sept. 20, 2:00 – 3:30 PM

Starting a Home Orchard

Marshall

• Elizabeth Ayers: (828)649.2411

Sept. 24, 10 AM – 12 noon

Fall Lawn Care Workshop

Morganton Hardware

• Donna Teasley: (828)439.4460

Sept. 24 – 25, 9:30 AM – 6 PM

Blue Ridge Open Charity

Horse Show (hosted by 4H)

Blowing Rock Equestrian

Preserve, Blowing Rock

• Karee Mackey: (828)264.3061

Sept. 29, 9 AM – 4 PM

Good Bug, Bad Bug:

Embracing IPM in Your Business

NC Arboretum, Asheville

• Cliff Ruth: (828)697.4891

Sept. 30, 7 PM

Woodland Wonders from the

Wild with Barry Glick

Old Rock School, Valdese

• Donna Teasley: (828)439.4460

October 1, 10 AM – 4 PM

Practical Plant Propagation

Burke Agricultural Building,

Morganton

• Pre-registration required.

Donna Teasley: (828)439.4460

Smart Gardening — Sex in the garden

Pollination is a plant's way to meet a partner and reproduce. It occurs in many ways. Wind pollination is very common; it's how corn is pollinated. Insect pollination is also widespread. Hundreds, if not thousands, of insects contribute to pollination.

Many bees and wasps help to pollinate our garden flowers, vegetables and fruits and the natural landscape, too. Although most people think immediately about honeybees, many insect species will participate in garden pollination. Gardeners who are not able or willing to establish a honeybee hive can establish a pollinator friendly garden.

First, include in your garden different kinds of plants that will attract pollinators. A greater variety of plants means a greater variety of pollinators. And research has shown that honeybees need at least ten different plant pollens to have good nutrition, so a broad variety of plants will help to provide that nutrition.



Another point to remember in selecting plants is that just because you see a plant species on a bee friendly or pollinator friendly list does not necessarily mean that bees will use every cultivar. Cultivars selected for color or type of flower may not be as attractive to pollinators.

Observe what attracts pollinators in your area.

In addition to variety, remember, too, that you need a season-long supply of pollen and nectar to support pollinators.

Particularly in late summer and fall, they can experience a dearth or absence of nectar. With a little planning, gardeners can help bees and other pollinators by making sure gardens have some plants that bloom late in the season.

If you are interested in beekeeping, consider taking a beekeeping course this winter or spring. Contact your county Extension center now to find out about the opportunities in your county.

— Bill Skelton

Food Production — Growing shiitake mushrooms

When the leaves fall from the trees and the weather cools down, mushroom farmers here in western North Carolina get to work. The shiitake mushroom has become a fungus of interest since area farmers have found that shiitakes like it here. The weather is perfect, and the abundance of white oaks that grow in the region makes the foothills and mountains of North Carolina a prime location for shiitake mushroom production.

Mushrooms are suited to the smaller farms of western North Carolina, where there are plenty of shady wooded areas to stack inoculated logs while waiting for the spawn to grow and make mushrooms. White oak is considered the best wood for growing these delicacies. Although one log will produce mushrooms for eight to ten years, the initial inoculation process is quite a labor.

The window of time for inoculating logs is short. Inoculation can be done only while the trees are dormant. Logs must be cut and inoculated within two weeks. After the spawn is hammered and sealed into the logs, they are stacked, log cabin style, in a shady location.

Then the waiting period starts. It takes between six and twelve months for the first mushrooms to appear.

Harvest time is critical, as shiitakes must be harvested when they are just the right size. They may not be ready for harvest in the morning and be too large by the evening, so a close watch must be kept on mushrooms that are nearing the perfect size.

The shiitake mushroom project is overseen by North Carolina A&T University, and numerous workshops are held across the state for aspiring shiitake farmers. If you are interested in growing shiitake mushrooms, contact your local Extension agent to learn about upcoming workshops.



USDA-ARS

— Donna Teasley

Garden Spot — *The Gardens at Silvermont*

The Gardens at Silvermont is a project of the Transylvania County Extension Master Gardener Volunteer (EMGV) program. Its primary focus is to develop a site that will serve as both an educational resource for the community and a destination for those looking for a beautiful place to visit.

Silvermont is an 8-acre site that includes a home that is on the National Register of Historic Places. The home was deeded to the county in 1972 and serves primarily as a center of programs for senior citizens. The home and its land are a part of Transylvania County's park system, attracting a diversity of visitors to its ¾-mile gravel walking trail, basketball courts, tennis courts, picnic shelter and landscaped areas.

From March 2010 to the present, EMGVs have been working on-site every week renovating an old herb garden and transforming it to a native woodland garden. They have also excavated a site behind the house and created a new raised bed vegetable, herb and small fruits Learning Garden. The volunteers have created a Pollinator Garden and a Monarch Waystation behind the Learning Garden. The Waystation



Transylvania County Master Gardener volunteers are transforming an herb garden into a native woodland. ©Maryann Mickewicz

includes plants that attract insects beneficial to the gardens and that serve as habitat for monarch butterflies.

This garden has been certified by Monarch Watch, a division of the University of Kansas, and entered into the Monarch Waystation Registry. The garden is located at 364 E. Main Street in Brevard. To learn more, contact Transylvania County Cooperative Extension, (828)884.3109.

—Eric Caldwell

Environmental Stewardship — *Creating wildlife habitat*

Birds have three main requirements: food, water and shelter. These needs should be met through proper management of the backyard habitat. The bird species in our area and their food requirements change with the seasons. Primary food sources for migrant and resident birds in the spring are caterpillars and other insects. As we progress through the summer, breeding birds feed on insects and fruits when they become available. As migrant birds and their offspring fly south in the fall, they seek out fruits, which are high in energy and help to offset the energy lost during migration.

As you visit local garden centers this time of year, keep in mind that fall is a great time for planting. Re-evaluate your landscape and make sure you include early and late fruiting plants that provide wildlife food, such as blueberries, spicebush or a variety of hollies. If you can tolerate it and your neighbors will allow it, leave an

area of your landscape unmanicured to promote additional fruit and seed production. Keep in mind that plant diversity, especially among native plants, is as important as the fruit and seeds that plants produce. Plant a variety of species that will serve as homes to the leaf eating insects that birds devour.

Dense vegetation will provide birds with places to escape from harsh weather and predators. A variety of plant types should cover most of the needs for different bird species. Use grasses, shrubs and trees to cover all your bases. Remember that evergreens are important components to any wildlife habitat throughout the year.

Learn more about creating habitat for birds and other wildlife with native plants from NC State's website, *Going Native: Urban Landscaping for Wildlife with Native Plants*, <http://www.ncsu.edu/goingnative/>.

—Diane Turner

Tips & Tasks

Lawn Care

- Seed tall fescue lawns in September.
- Mulch newly seeded areas with wheat or barley straw.
- Fertilize and lime established fescue according to soil test results.
- Winterize lawn equipment. Sharpen mower blades. Clean garden tools before storing.

Ornamentals

- Fall is for planting. Check out the selections at local nurseries and garden centers.
- Divide and replant spring-flowering bulbs.
- Cut back and clean up the frost-killed foliage of perennials.
- Collect fall leaves for composting. Use shredded leaves for mulch.
- Add color with pansies and chrysanthemums.

Edibles

- Fall crops, such as turnips from seed or cabbage, broccoli or collards from transplants, can be planted in late August into early September.
- Topdress strawberry plants with 1 lb ammonium nitrate per 100 ft of row between August 15 – September 15. Brush any excess fertilizer from the leaves to prevent burning.
- Remove debris from the summer garden. Consider planting a winter cover crop of annual ryegrass or crimson clover to prevent soil erosion. It can be turned under in the spring for organic matter.

—Jan McGuinn



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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