



Extension Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

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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



Smart Gardening — Xeriscaping

Many gardeners in our region have spent months of the past several years dealing with extended drought. While altering watering practices or using rain barrels can help to deal with drought, the best long-term sustainable approach to this problem is xeriscaping, or landscaping with drought-tolerant plants.

Landscape plants vary in their degree of drought tolerance. Some, such as lantana, yaupon and Texas sage, thrive under conditions that would cause others, such as hydrangea, Japanese maple and impatiens, to wither and die. If you are planning to expand your landscape this fall, there are many great drought-tolerant selections available.

Almost all ornamental grasses are drought-tolerant, including the dazzling pink muhly grass, *Muhlenbergia capillaris*. The tall pink plumes of this tough, sun-loving native add great color to the fall garden. Like all ornamental grasses, muhly grass also brings the element of movement into the landscape as its leaves and plumes sway during each gentle breeze.

For spring color, try *Baptisia australis*, or false indigo, a drought-tolerant prairie native

with 3- to 4-foot tall spikes of blue flowers. In addition to this species, several hybrids and cultivars of baptisia are available, with blossoms ranging from purple to yellow to white.

Coneflower, *Echinacea purpurea*, is a fantastic drought-tolerant perennial that blooms in summer. Many new cultivars of echinacea have come to the market in the last several years with colors other than purple and white, including 'Green Envy', 'Tomato Soup' and 'Hot Papaya'.

Some drought-tolerant shrubs to consider include 'Carissa' holly (*Ilex cornuta* 'Carissa'), Japanese plum yew (*Cephalotaxus harringtonia*), dwarf nandina (*Nandina domestica* 'Firepower') and American beautyberry (*Callicarpa americana*). All these prefer sunny sites except cephalotaxus, which thrives in the shade.

Just because a plant is drought-tolerant does not mean it will never need water. These plants need to adjust when first planted like any other plant. They need to be watered regularly for the first several weeks or months. "Drought-tolerant" simply means that once the plants are established, they will be better able to endure extended dry periods than other plants.

—Matt Stevens

Upcoming Events

September 8 – October 20; Every Thursday (9 AM – 4 PM)

Certified Plant Professional Training

Wilson County Cooperative Extension, 1806 SW Goldsboro Street, Wilson

Pitt County Cooperative Extension, 403 Government Circle, Greenville
• (252)237.0113 or (252)902.1701

September 25 (1 PM – 4 PM)

Open House

Wilson Botanical Gardens, 1806 SW Goldsboro Street, Wilson
• (252)237.0113

October 8 & 9 (10 AM – 4 PM)

Art in the Arboretum

New Hanover County Arboretum, 6206 Oleander Dr., Wilmington
• (910)798.7670

October 17 (5 PM – 6 PM)

Alive at 5: 'Howl'oween

Wilson Botanical Gardens, 1806 SW Goldsboro Street, Wilson
Bring your pets dressed up for Halloween!
• (252)237.0113

November 9 (9 AM – Noon)

Carolina Canopies Workshop

Craven County Agricultural Building, New Bern. Presented by the NC Urban Forest.
• (252)633.1477

Pruning Workshop

November 16 (10 AM - Noon)

Pitt County Cooperative Extension, 403 Government Circle, Greenville
• (252)902.1709

Food Production — Winter squash: A fall treat

Although winter squashes are planted in spring, it is not until early fall that the fruits are ready for harvest and enjoyment.

"Winter squash" is a common name for several members of the gourd family, including acorn, spaghetti and butternut squashes.

Unlike their cousins summer squash and zucchini, winter squashes are not ready for harvest until the fruits have fully matured and their skins have hardened into a tough rind.

Winter squash can be used in many recipes, including breads, soups and salads. They are loaded with nutrients, including vitamins A and C, and have only 65 calories per half-cup serving. The smooth, fine-grained flesh makes winter squash ideal for cooking. In fact, many cooks prefer to use winter squashes for pies instead of pumpkins as they taste the same and their flesh is not as fibrous as that of a pumpkin.



When selecting winter squashes for cooking, choose fruits with hard, tough rinds that are heavy for their size and free of cuts and blemishes. Some of the thinner skinned varieties can be peeled with a vegetable peeler, but others must be cut and baked before peeling.

Cutting a winter squash in half is not always easy. A mallet may be needed to assist the knife. Once cut in half, the squash can be baked, cut sides down, in a shallow baking dish for 30 minutes at 350°F. Peeled pieces can be cut into cubes and added to soup or boiled until tender and

mashed.

All winter squash varieties can be stored for months in a dry 50°F room. Ideally the fruits should not touch one another during storage. If necessary, they can be stacked in layers no more than two deep.

(USDA-ARS Photo)

—Katy Shook

Garden Spot — Kinston–Lenoir County Children’s Garden

The Kinston-Lenoir County Children’s Garden is celebrating its sixth year of sharing the outdoors with local children. This small garden in Kinston is an active collaboration between Cooperative Extension, Kinston Parks & Recreation, Master Gardener Volunteers and the public.

Located on the edge of the 1999 Hurricane Floyd floodplain, the garden is a mixture of flower and vegetable beds built around several gathering centers designed as spaces for outdoor education. Gathering centers include a tree house, walnut circle, green carpet and gazebo.

Interesting creatures can also be found among the many beds that make up this



©Peg Godwin

exuberant garden. Patches of herbs, a butterfly garden, an “ABC” garden and a colorful bird garden are among the many themed areas that make this garden a joy to explore. Children enjoy tasting the fruits and vegetables growing in the raised bed area. A rain garden and bog

garden demonstrate the value of water in the garden. Under development are a native plant section and a touch-and-feel garden for small children.

Children from summer day camps, preschool programs and after-school facilities participate in the educational fun. Pumpkin Day each October brings together

the many faces of Lenoir County Cooperative Extension and families from all over the county. Call (252)527.2191 to learn more.

— Peg Godwin

Environmental Stewardship — Recycling leaves

As fall approaches, deciduous plants shed their leaves and prepare for winter, which brings up the question, “What can be done with all those leaves?” Composting is a great way to reuse those mounds of leaves, recycling them into organic matter that can be used to enrich garden, landscape and flower beds. When mixed with soil, compost increases organic matter content, improves drainage and adds nutrients to the soil.

So, what exactly is composting? At its most basic, composting is controlled decomposition. In nature, organic materials eventually break down into a rich, crumbly, earthy substance that is very beneficial to plant growth. Composting simply speeds up this process by controlling the factors that influence how quickly natural materials break down.

Tiny microbes are responsible for breaking down bulky organic materials into compost. To do their job, microbes need plenty of oxygen. Compost piles should be turned once or twice

a month to provide the necessary oxygen and speed up the decomposition process. A compost pile with foul odors is an indication that not enough oxygen is present.

Microbes also require moisture. Water compost piles when rainfall is limited. Enough water should be added to completely moisten the pile, but avoid overwatering. Keep the compost pile damp but not soggy.

Many organic materials are suitable for composting, including grass clippings, yard trimmings, vegetable and fruit scraps, leaves and shredded newspapers. Starting with a 50/50 mixture of fresh green materials and dry brown materials will result in the materials breaking down faster.

The size of material being added to a compost pile will also influence the time it takes for compost to be ready to use; more finely ground materials will break down faster. To speed up the composting process, shred or chop materials before adding them to the pile.

— Della King

Tips & Tasks

Ornamentals

- Fall is an excellent time to plant trees, shrubs and perennials in the South.
- Replace summer annuals with cool-season favorites like pansies, ornamental kale and snapdragons in September and October.
- Do not prune trees and shrubs in fall. This will stimulate new growth that will not have time to ripen before frost.

Edibles

- Late summer is the time to plant cool-season vegetables. Set out transplants of cabbage, broccoli, cauliflower, kale and collards by mid September. Sow lettuce, spinach, radish, beet, turnip and parsnip seed directly into the garden.
- Sow cover crops such as hairy vetch, crimson clover or annual rye in areas where vegetables will not be growing through winter. Till these crops into the soil in spring to improve the soil.

Lawns

- Raise your mower height by ½-inch in late September. Raise centipede and carpet grass mowing heights to 1½ to 2 inches, Bermuda and zoysia lawns to 1½ inches, and St. Augustine to 4 inches.
- Do not apply nitrogen fertilizers to warm-season grasses in the fall.
- Apply a pre-emergence herbicide in early September to prevent cool-season weeds.

—Charlotte Glen



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

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

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

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Giant pumpkin grown by Wallace Simmons

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