



# Extension Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

Fall 2010

Empowering gardeners. Providing garden solutions.

## Gorgeous Grasses for Garden Texture

Ornamental grasses are perfect additions to any planting. Their graceful, airy form and linear texture contrast with shrubs and perennials. In addition to being beautiful, most grasses are tough, drought-tolerant and deer-resistant, and have few insect or disease problems. Ornamental grasses are becoming more common in NC landscapes. Easy-to-grow varieties are available from most garden centers.

Like turf grasses, ornamental grasses can be divided into warm- and cool-season varieties, based on the season in which they actively grow. Gardeners in eastern North Carolina should stick with warm-season varieties, while those in the piedmont and mountains can grow both types.

Two of the most garden-worthy warm-season growers are native to the Southeast. The drought-tolerant pink muhly grass (*Muhlenbergia capillaris*) has masses of delicate, airy, vibrant pink flower panicles in fall. (See back page.) This clump-forming grass is hardy to Zone 6, grows to 3 feet tall and prefers well-drained sunny sites. For a different twist, seek out the variety 'White Cloud', which produces ivory-white flower panicles instead of the more common pink.

Another great native warm-season grower is switchgrass, aka panic grass (*Panicum virgatum*). It grows in most soils, including sand and clay, but needs full sun to perform best. Several varieties are available, all of which produce airy sprays

of buff-colored flowers and seedpods in late summer and fall. 'Cloud Nine' is a colossal, sturdy, upright variety that easily reaches 8 feet tall. 'Prairie Fire' is an excellent smaller selection, growing 3 to 4 feet tall, with lovely burgundy-splashed foliage. A personal favorite is 'Northwind', an extremely vertical, 5-foot-tall olive-green selection. Switchgrass varieties form slowly spreading clumps that can be divided every 3 to 4 years.

Other popular warm-season growers include fountain grass, *Pennisetum alopecuroides*. There are many varieties of this sun-loving summer-blooming grass, most of which grow to 3 feet or less. Maiden grass, *Miscanthus sinensis*, has long been a staple in the ornamental grass trade, but should be used with care as it has become invasive in western North Carolina.

Popular cool-season growers include blue fescue (*Festuca glauca*), a small clumping grass with intense blue foliage, and *Calamagrostis* 'Kark Foerster', which produces strongly upright spikes of pink blooms in summer that fade to tan in fall. Gardeners with wet soils should seek out the many varieties of ornamental sedges (*Carex* species) to add a grassy texture to pond edges and low areas. To find out more about these and many other ornamental grasses, visit the plant profiles on the NC Cooperative Extension Urban Horticulture website: [www.ncstate-plants.net](http://www.ncstate-plants.net)

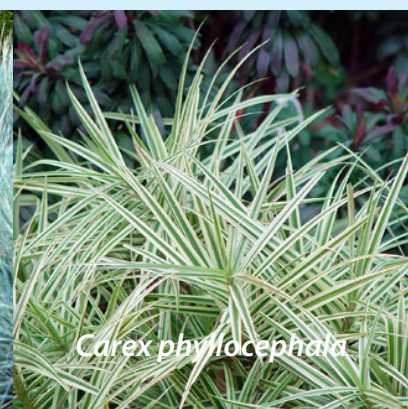
—Charlotte Glen



*Pennisetum alopecuroides*



*Festuca glauca*



*Carex physocarpa*

### in this issue

#### PIEDMONT NEWS

Siting Your Rain Garden

Big Garden Cleanup!

Daniel Stowe Botanical Garden

Turning Over a New Leaf

#### STATE NEWS

Gorgeous Grasses for Garden Texture

Pink Muhly Grass

Preventing Garden Diseases

Fruit Trees

Florida Betony

## Upcoming Events

**Extension Master Gardener Volunteer course**

- Learn in-depth horticultural info to share with others. Contact your county Extension Center: [www.ces.ncsu.edu/counties](http://www.ces.ncsu.edu/counties)

**September 11****Late-Season Vegetable Gardens**

- Daniel Stowe Botanical Garden, 6500 S New Hope Rd., Belmont*
- Extend your garden into the cooler season. 704.922.2124

**September 11****Planning and Planting a Cool-Season Garden**

- Southwest Regional Library, 3605 Shannon Rd., Durham*
- Tips on cool-season edibles. 919.560.8594

**September 19****Backyard Chickens**

- Durham County Extension Center, 721 Foster Street, Durham*
- How to start your own flock. 919.668.5309

**September 25 (10:30 – 11:30 AM)****Revitalizing Your Lawn This Fall**

- Southwest Regional Library, 3605 Shannon Rd., Durham*
- Re-seeding, aeration, selecting a turfgrass and soil-testing. 919.560.8594

**October 9 (10:30 – 11:30 AM)****Composting at Home: Traditional Style or with Worms**

- Southwest Regional Library, 3605 Shannon Rd., Durham*
- Traditional composting and vermiculture. 919.560.8594

**October 14 – 24****NC State Fair**

- State Fairgrounds, Raleigh*  
<http://ncstatefair.org/2010>

**October 23 (10:30 – 11:30 AM)****Putting Your Garden to Bed for Winter**

- Southwest Regional Library, 3605 Shannon Rd.*
- Pruning, cover crops, cleaning and sanitation. 919.560.8594

**November 8****Backyard Composting**

- Durham County Extension Center, 721 Foster Street, Durham*
- Expert tips on composting and vermicomposting. 919.560.0525

**November 21 (2 – 4 AM)****Trees for the Urban Landscape**

- Sarah P. Duke Gardens, 426 Anderson St., Durham*
- Planting and mulching; trees for urban areas. 919.668.1707

Smart Gardening — *Siting your rain garden*

Rain gardens can be beautiful landscape features that help conserve water by using what would otherwise flow off your site. Placement is important. A rain garden should be located between the source of runoff (roofs and driveways) and the runoff destination (drains, streams, and low spots). To select a location for the rain garden, begin by observing your yard during a rainfall. Notice where water flows from, and where it goes. Be sure to consider the following:

- A rain garden should not be within 10 feet of a house foundation.
- It should be located at least 25 feet from a septic system drainfield.
- It should *not* be placed within 25 feet of a wellhead.
- Make sure to avoid underground utility lines.
- The best location will be in partial to full sun.
- Rain gardens should be constructed where the water table is at least 2 feet below the soil's surface. If you hit the water table when constructing your rain garden, consider turning it into a wetland garden.

Once a location is selected, you may decide to send additional water to the site. Flexible plastic pipe can be used to direct water from downspouts and collecting areas to the rain garden. Corrugated plastic pipe can be used to direct water from a distant downspout to the garden drainage area. Be sure to factor this additional water flow into your garden sizing calculations.

Rain gardens work best when constructed in well-drained or sandy soils; it is best to avoid impermeable soils, otherwise you have a backyard wetland. Dig a hole 1 foot deep at the rain garden site and examine the soil. There are three signs of an impermeable soil: the site ponds water or remains saturated for several days after a storm event, the soil shows signs of being a wetland soil within 1 foot of the surface (often gray with ribbons or areas of brown color), and water poured in the hole is still there after 2 days (provided it hasn't rained).

If these steps are followed, you should be well on your way to having a rain garden to help beautify your yard.

—Kelly Collins

Food Production — *Big garden cleanup!*

By the end of summer many vegetable gardens are so overgrown, it's a little scary to think of walking through them. But do yourself a favor; get out there and clean the garden up. If you have had problems with insects or disease, you are dealing with living organisms that need somewhere to survive winter. Winter presents survival challenges to most living things. By leaving the old squash and tomato plants (along with the crabgrass and nutsedge), we provide protection for insect and disease organisms and enhance their ability to survive into next year.

One of the most comprehensive strategies you can employ is to remove all that old vegetation from the garden. You probably shouldn't even try to compost it. Save it for the winter bonfire or haul it off; just get rid of it! Tilling the garden during fall or winter will further expose surviving insects and pathogens to drying

out or cold temperatures.

It's even a good idea to go ahead and lay out your beds and rows for the next planting. You know how frustrating it can be when you want to plant peas or spinach in February but it's too wet to plow? If the space is ready, it's much less complicated to open up a furrow and drop in the seeds.

And for those areas that you won't plant until late spring, go ahead and plant a short term cover crop. One of the easiest to grow is annual ryegrass. It will also be among the easiest to get rid of next spring. The cover crop helps to recycle nutrients left over in the soil. It protects the soil from erosion. It improves water infiltration and retention in the soil. It adds organic matter to the soil. And it competes very well with the winter weeds.

—Al Cooke

## Garden Spot — Daniel Stowe Botanical Garden

Daniel Stowe Botanical Garden is located west of Charlotte on 380 acres along the banks of Lake Wylie. It is described as “the garden for all seasons,” and is proving to be just that. From the popular hummingbird banding program, “Wild-Wings,” and a new art exhibit, “Come Sit a Spell,” the summer has been packed with fun and educational opportunities.

September promises to be exciting with the return of “Something’s A-Flutter,” which consists of butterfly releases, exhibits, and demonstrations in the 8,000-square-foot Orchid Conservatory. October brings nature-based art shows and sales, along with fun for the kids – with daytime events featuring plant-based Halloween activities. Of course, there’s year-round appeal from the spectacular gardens, dancing water fountains, visitors’ pavilion, gift shop and nature walk.

In addition to the wonderful grounds and exhibits, the garden hosts a plethora of opportunities for continuing education, for both the young and the young at heart. “Garden Adventure” camps are held throughout the summer, along with Girl Scouts Day in the fall. Adult



**Sensational plants and striking garden structures, including fountains and a visitors’ pavilion, make Daniel Stowe Botanical Garden a year-round pleasure for gardeners.**

education topics include horticulture, wildlife, conservation, photography, fine art and floral design – and more. Program formats include classes, tours, lectures, workshops, symposiums and events. Continuing education classes are presented on weekends and select weekdays throughout the year.

For information on admission, plants, classes and events at the garden, visit [www.dsbg.org](http://www.dsbg.org) or call 704.825.4490.

—Julie Flowers

## Environmental Stewardship — Turning over a new leaf

As fall rolls around, we look forward to the great color of the trees as they prepare for dormancy. We can also look forward to the opportunity to collect some great soil-building materials.

Leaves are a great source of organic matter and nutrients. According to Texas A&M University, leaves contain 50 to 80 percent of the nutrients a plant extracts from the soil and air during the season. That’s a lot of free fertilizer! In addition, the leaves will provide food for bacteria, fungi, earthworms and all the other critters that live in the soil. This creates a healthy soil in which your plants will thrive.

Another way to use your leaves is in the compost pile. A simple wire cage at least 3 feet high and as wide as you can handle will contain the whole or shredded leaves and keep them

from blowing around your yard all winter.

You can build a garden “from the ground up” by using an old method that has become new again. “Lasagna Gardening” is a method that uses leaves that are simply piled on the ground and left to rot. This is technically called “sheet composting.” It allows you to build your beds by placing the leaves wherever you need or want a new flower or vegetable bed. Leave the organic material in place for 3 to 6 months, and it will have decomposed enough to plant into. If you are in a hurry, you can create pockets of soil in the mix and plant directly into them.

So this fall, turn over a new leaf and keep all your leaves instead of blowing them to the curb. You (and your plants) will be glad you did!

—Jeff Rieves

# Tips & Tasks

## Lawns

- Remember this tip for fertilizing cool-season (fescue, bluegrass) lawns: Fertilize around Labor Day, Thanksgiving and Valentine’s Day. Fescue lawns are green and growing throughout the cool months of fall, winter and spring.
- Plant fescue seed to fill in bare spots or rejuvenate your lawn during the first half of September. Doing it right will pay dividends for years to come. Call your local Extension Center for publications and suggestions on lawn care and renovation, and then ask about how to collect soil samples. Do it now!

## Ornamentals

- Prepare plants for dormancy. Trees and shrubs need time in the fall to slow down and prepare for the winter, so do not fertilize or prune after July. Properly acclimated plants are less susceptible to damage from winter weather.
- Divide spring- and summer-blooming perennials that are overgrown. Dig the plants, gently separate them into smaller clumps and replant immediately. They’ll have plenty of time to get re-established before next spring.

## Edibles

- Plant a cover crop in your vegetable garden. Legumes, such as clover and alfalfa, will enrich the soil by fixing nitrogen. Cover crops prevent erosion, and can be turned over to decompose in the soil and provide needed organic matter.

—Michelle Wallace



**Showstopper** — *Pink muhly grass*

**P**ink muhly grass (*Muhlenbergia capillaris*) is an absolutely showstopping source of late-season color. As an ornamental grass, it is a great compliment to those landscape beds with fading summer annuals. The delicate plumes of flower panicles create a striking pink haze above the foliage. This perennial is attractive individually but really makes a big show when used in mass. Pink muhly grass can reach a height of 4 feet and a width of 3 feet. Give it plenty of sunshine, and transplant into soil that is well-drained.

A North American native, pink muhly grass sounds too good to be true. It's as reliable as promised. Long-lived with little to no insect or disease pests, this ornamental grass is perfect for the low-maintenance garden. It tolerates heat, humidity, drought and poor soil, and does best in Zones 6 to 9.

—John Vining

Sustainability

**Preventing Garden Diseases**

One important and overlooked gardening chore is cleaning up at the end of the growing season. The amount of cleanup done in the fall will directly affect the success of next year's crops. Every weed removed this fall means fewer weeds next spring. Get any old crops out of the garden space before winter sets in. Dead plants and leftover vegetables are perfect over-wintering places for diseases and insects. Slugs and bugs can spend the winter in plants and weeds, and disease organisms such as early and late blight can also survive the winter in discarded vegetables, stems and leaves. Place leftover plants that have had pest or disease problems in trash bags or burn them to prevent spread. Never put infested plants or perennial weeds in the compost pile.

—Donna Teasley

**Incredible Edibles** — *Fruit trees*

**W**hen you choose a landscape tree, you consider whether it is well-adapted to your local environment and if it will fit your space when mature. You might think about whether the tree has showy flowers and will attract beneficial honeybees to your landscape. Use the same criteria to choose a fruit tree.

Look first for fruit that grows well in your region. Not every part of the state can grow every fruit or every variety of a particular fruit. Check with your county agent for specific varieties best suited to your location. Choose full size, semi-dwarf or dwarf rootstocks, depending on how much space you have.

To have a healthy fruit harvest, you also may need some pest management skills and strategies. Choose tender fruit, such as peaches, only if you are ready and able to devote a good bit of time and energy to pest control.

—Anne Edwards

**Pest Alert** — *Florida betony*

**F**lorida betony is an aggressive weed that is becoming more common across the state. Once introduced, it can spread rapidly and be difficult to control.

This perennial weed is most noticeable during late summer to early fall and in early spring. It typically remains green through the winter. Florida betony has square stems with leaves that are opposite and lance-shaped with toothed edges. The best way to identify it is to dig it up. The white, segmented tubers resemble a rattlesnake's rattle, hence the common name "rattlesnake weed." The tubers contribute to the weed's invasiveness and rapid spread.

When you see Florida betony emerge, repeat-

edly hoe or cut out the top growth to starve the weed's root system. For lawns, apply a selective herbicide labeled to control Florida betony in the fall to emerged Florida betony. Follow with a second application in midwinter or early spring. Suppress it in landscape beds or around trees and shrubs by applying a 2- to 3-inch layer of mulch. To provide an additional barrier, use a landscape fabric beneath the mulch layer. Controlling Florida betony requires persistence. It can take several years to get rid of Florida betony in heavily infested areas; repeated herbicide applications will be necessary for a few years.

—Della King



[www.ces.ncsu.edu](http://www.ces.ncsu.edu)

**Extension Gardener** provides timely, research-based horticultural information. We publish 4 issues per year. Send comments about **Extension Gardener** to Editor and Team Leader **Lucy Bradley, Ph.D.**, Extension Specialist, Urban Horticulture, Box 7609, NC State University, Raleigh, NC 27695-7609

Managing Editor **Will Strader**  
 Content Editor **David Goforth**  
 Regional Editors  
 Coastal Plain **Anne Edwards, Charlotte Glenn**  
 Piedmont **Carl Matyac, Mark Blevins**  
 Mountains **Donna Teasley, Dianne Turner**  
 Production Editor **Barbara Scott**  
 Designer **Karl Larson**

*Photos courtesy JC Raulston Arboretum unless otherwise noted.*

*The use of brand names does not imply endorsement by N.C. Cooperative Extension nor discrimination against similar products or services not mentioned.*

Distributed in furtherance of the acts of Congress of May 8 and June 30, 1914. North Carolina State University and North Carolina A&T State University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, veteran status, or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

©North Carolina Cooperative Extension **Extension Gardener** may not be reproduced without written permission. Any news media using sections of the newsletter should credit "Extension Gardener, N.C. Cooperative Extension."

11-CALS-2058—9/10

<http://extensiongardener.ncsu.edu>



Florida betony (*Stachys floridana*)

© R.D. Wallace, Bugwood.org