

FALL 2018

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Fall Color: The Last Big Hurrah

What does a gardener look for when planning a landscape? Flowers, texture, growth habit, and size (let's hope), growing needs such as sun or shade, deciduous or evergreen plants, and many other characteristics. But many gardeners never consider the fall characteristics of the trees and shrubs they plant. Everyone wants that "wow" look for the spring with hopes that the landscape will continue to be pleasing as the growing season progresses. But by the time fall arrives, gardeners are very often tired of the challenges of the summer and don't give much thought to what a great fall landscape might look like. It's a shame because fall is the last big hurrah of the growing season.

Many great plants are readily available with fall attributes that are truly amazing. A perfectly nice and respectable tree or shrub can all of a sudden become the star of the show when fall arrives. Look at the beautyberry (*Callicarpa americana*), a nice-looking shrub but sort of ordinary until those massive clusters of bright-purple berries appear. Then everyone wants to know what it is and where you got it—the greatest compliment for a gardener! There are as many different viburnums as there are aphids on a rosebud. And aside from their fragrant flowers in the spring, many viburnums take a second bow when fall rolls around. Their fall foliage is striking and bold—an absolute asset to the fall landscape. Many of our maples are fall stars also, as are chokeberry, Virginia sweetspire, oakleaf hydrangea, smoketree, sweet autumn clematis, and fothergilla.



Beautyberry (*Callicarpa americana*).
 ©Forest and Kim Star, CC BY2.0



Ginkgo tree (*Ginkgo biloba*). ©Maxmaria, CC BY-NC-ND-2.0.



Oakleaf hydrangea (*Hydrangea quercifolia*). ©K M, CC BY-2.0.

Many perennials also wait for the fall to do their best. Let's not forget the gazillion heucheras that have become garden staples with their brightly colored leaves. Russian sage, many of the rudbeckias, lavender, butterfly bush, hardy ferns, perennial sages, cosmos, hardy mums, and countless others give the fall garden a second chance, reveling in the cooler temperatures and gentler rains.

But, perhaps, the king (or queen) of all the fall showoffs is the ginkgo tree (*Ginkgo biloba*). The ginkgo is a massive tree growing up to 80 feet high with brilliant, golden-yellow leaves and not necessarily suited to all home landscapes. But with the introduction of the 'Goldspire' ginkgo, with its columnar growth habit and a mature height of 16 feet with a 5-to-6-foot spread, most anyone can now have a ginkgo in their fall collection.

There are many more plants that will add fall beauty and interest to the home landscape. With a little research the gardener can put some fireworks in the garden before winter arrives.

Extension Showcase

2018 Western North Carolina Gardening Symposium

The upcoming Western North Carolina Gardening Symposium is brought to you by the Extension Master Gardener VolunteersSM of Buncombe, Haywood, Henderson, and Polk counties.

This one-day conference is open to the public and perfect for gardeners who are interested in expanding their gardening knowledge and networking with others who enjoy gardening in the western region of North Carolina. Online registration is now open for the event, to be held October 3, 2018, at Blue Ridge Community College in Flat Rock, North Carolina.

Our speakers are Joe Lamp'l of PBS's "Growing a Greener World"; Harvey Cotten, author of *Easy Gardens for the South*; Arthur Joura, Bonsai Curator at The North Carolina Arboretum; and Matt and Tim Nichols, known around the world as "Mr. Maple."

New this year is online registration, so you will receive instant confirmation of your reservation. The symposium fee is \$60 if you register by midnight on September 1, 2018, and \$65 after that date. All registrations must be received by September 15, 2018.

For more information about speakers and the conference schedule and for registration, visit our website: www.buncombemastergardener.org/2018-wnc-gardening-symposium/.

Questions about this event should be emailed to the following address: WNCgardeningSymposium@gmail.com.

—Alison Arnold

Smart Gardening: Attract fall pollinators with flowers



Goldenrod performs well in full sun to partial shade.
©Dan Mullen, CC BY-NC-ND-2.0

Summer isn't the only time to think about including foraging finds for pollinators in the garden. In addition to adding beauty to the garden, flowers attract pollinators to the area and can help improve pollination for vegetable crops that rely on animal and insect pollination. Some great options that will do well in western North Carolina include goldenrod, purple asters, Maximilian sunflower, joe-pye weed, and 'Autumn Joy' sedum, just to name a few. All of these are fall blooming flowers that do well in our hardiness zones.

Goldenrod includes a few native species, does well in full sun to partial shade, is heavily drought-tolerant, and will grow 2-to-3-feet tall. Purple asters will do well in the same conditions, so the two can be planted together, and there are aster species native to North America as well. Have you ever had a fall sunflower? The Maximilian sunflower is a great perennial option for those who love sunflowers and want to extend their bloom seasons into fall. The sunflowers will grow 5-to-8-foot tall and are extremely drought-tolerant. Joe-pye weed is another tall option that also reaches 5 to 8 feet and will begin blooming in late summer and continue into the fall. Joe-pye weed does best with full sun and a decent

amount of space. The 'Autumn Joy' sedum attracts a wide range of butterfly species and does not require irrigation once established. It is best to plant as a transplant rather than from seed, and it will bloom throughout fall.

—Hannah Bundy

Food Production: Perennial onions

Perennial onions (*Allium cepa* var. *aggregatum*) provide a steady supply of green onions or bulbs. Multiplier onions, potato onions, and shallots multiply from one fall-planted clove to form a bulb of several cloves, similar to garlic. They are dug in summer, cured, and stored for eating or re-planting. To plant, separate bulbs into individual cloves and plant according to depth instructions. Reserve some for spring planting in case of a severe winter. A light straw mulch provides winter protection and maintains soil moisture. Cut any scapes and remove mulch as the necks die down. Harvest when the neck begins to weaken and fall. Continue harvesting for the next two weeks as additional necks fall over. Move them immediately to shade and allow to cure in a well-ventilated place. Harvest those with green necks last, but eat them first as they will not last in storage. Walking onions are grown for the green tops, which are cut repeatedly as green onions. They produce bulblets at the top of the greens that fall over and sprout. Plant in fall and only dig these if you want to move them or consume the strong-flavored bulbs. Perennial leeks (*Allium ampeloprasum*) are slender, bunching leeks that multiply into many small bulbs. Plant dormant bulbs in spring. Harvest green shoots as they emerge in fall or winter. Or leave them to mature in late winter and eat the slender new leeks in spring. Dig and divide every few years. Choose a well-drained soil rich in organic matter for your perennial onions and leeks. Keep beds weed-free. If you are new to perennial onions, purchase a starter set this fall to try. As you harvest and divide them, you will build a self-sustaining supply of diverse alliums for your kitchen and to share.



Walking onions are grown for the green tops. ©Eli Snyder

—Eli Snyder

Pest Alert: How to make a fruit fly trap

Fruit flies can be found year-round, but they are especially problematic during the late summer and fall months. Adult fruit flies are about 1/8-inch long, and they have red eyes. They are tan in the front and black in the back. If you are bringing produce from the garden into the house and setting it out on the counter, you are especially likely to experience an infestation. The best ways to prevent fruit flies are to wash any fruit that you bring into the home thoroughly, dispose of old fruit, keep a lid on the kitchen compost bin and empty it regularly, and be as tidy as possible in the kitchen (these strategies have the added bonus of also helping to prevent ants in the kitchen). Sometimes we find ourselves with an infestation starting. Fruit flies are speedy reproducers, and their population can grow rapidly. Eggs will often be laid near the surface of fermenting foods and other moist organic materials, and each egg will complete its life cycle in one week with one female being capable of laying 500 eggs in that time.



Fruit flies can be trapped and disposed of. ©Steven Pettis

Once you have fruit flies in your home, the best way to catch them is to build a trap. To create a trap, mix 1 cup warm water, one pinch dry yeast, and 1 teaspoon sugar. Put the mix into a mason jar. Roll a piece of printer paper into a funnel with one end no wider than a pencil lead and the other at least as wide as the jar. Tape the paper where it overlaps near the point of the funnel to ensure the opening stays tiny. Place the paper funnel in the jar with the pointed end at least an inch above the liquid. Fold the top of the funnel out over the edges of the jar and secure with a rubber band or the jar's ring lid to prevent the fruit flies from escaping. You can cut off the extra paper outside the rubber band if you wish. Place the trap on the counter top away from windows, air vents, or areas where you frequently work. The trap will lure the pesky critters in, and eventually they will die. Change the bait mixture every week.

— Steven Pettis

Lawns: It's all about timing for cool-season grasses

Fall is prime time for the cool-season grasses of western North Carolina. Seeding, overseeding, fertilization, and weed control can all be very successful during this time of year. Even though it is still hot during the day, the nights are definitely cooler, and this cool air is literally a "breath of fresh air" when it comes to the health and well-being of the cool-season lawn. Two applications of fertilizer should be applied during the fall: one around Labor Day and another at Thanksgiving. A winterizer fertilizer can be used or a slow-release lawn food will work very well. Seeding or overseeding can be done any time from mid- August until late October. But keep in mind that the earlier the seed gets in the ground, the better established it will be when cold weather hits. Specific steps for seeding, overseeding, and fertilization can be found in *Carolina Lawns* (AG-69).

Fall weed control, when done properly, can relieve a multitude of problems in the spring lawn. Winter annuals start to germinate in September and grow throughout the winter. Many homeowners don't notice the weeds until the following spring when they start to flower. Of course, these weeds have already dispersed seeds for next year and control in spring is futile. Be careful to protect broadleaf perennial ornamentals nearby when applying broadleaf weed killers to turf during the late fall and winter to get rid of pesky winter annual weeds before they get old enough to do damage. Chickweed, henbit, hairy bittercress, and red deadnettle are some of the common winter weeds.

It's time to get busy. If your time is well-spent, you can have the nicest lawn in the neighborhood next spring. As with all things growing, it's about proper timing. When the gardener gets his timing right, everything else falls into place! For more information on Lawn Management, see the *Extension Gardener Handbook*.

—Donna Teasley

Tips & Tasks**Trees and Shrubs**

- Fall is the perfect time to plant trees and shrubs. Remember, it is still necessary to water your newly planted tree or shrub during dry periods.
- Fall is generally not a good time to prune; only remove dead or diseased limbs. If you have fruit-bearing trees, any dropped fruit or diseased leaves should be removed and disposed of off-site to prevent fungal disease reinfection in the spring.

Herbaceous Ornamentals

- Spent flowers and stems can be cut back, and fall flowering species can be planted.
- Overgrown or less vigorous spring- and summer-flowering perennials can be divided once the foliage begins to die back.
- You can also plant spring-flowering bulbs, including daffodils, tulips, and hyacinths.

Vegetable Gardens

- Plant greens such as collards and kale in late summer for harvest throughout fall and even into winter if given protection from extreme cold.
- Fall is a fantastic time to sample your soil to evaluate soil pH and fertility. Separate samples should be collected and submitted from each unique area in the landscape. Samples sent in before Thanksgiving will be processed at no cost. Soil boxes can be obtained at Extension centers.

—Sara Freeman



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Helping You Grow

Need tree work done? Call an arborist

We get a lot of questions in our office about trees, everything from why a tree is dying to how it should be pruned. There are times when clients need help pruning a tree or determining if it is a hazard that should be removed. While Cooperative Extension is a great resource for research-based information, there are some things we just can't do. One of them is going out and pruning trees for clients, especially big trees. And even if a tree is in danger of falling, we can't go out to someone's yard and cut the tree down. In Extension, though, we are about finding the answers. If we can't provide the solution, we find someone who can. One of the resources that we rely on when it comes to trees is a list of certified arborists.

Certified arborists get their credentials through the International Society of Arboriculture (ISA) and are qualified professionals who can do everything from fertilizing to applying pesticides, to pruning or taking down a tree, to testing the integrity of the heartwood to see if the tree is in danger of falling unexpectedly. You can call your county Extension center for a list of arborists, or you can find them using the search function on the ISA website: treesaregood.org/findanarborist.

How to Hire a Tree Care Professional (NC State Extension publication AG-691) provides more information.

—Hanna Smith

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Plant Watch: Butternut squash

What welcomes cool days more than a savory soup? One delectable soup base you can grow in the garden is butternut squash, which can be planted in the spring and again in midsummer for a fall harvest. This squash is considered a healthy powerhouse option, loaded with vitamin C, beta-carotene, and fiber. It grows easily when seeded directly in the ground with two to three seeds per hill. One plant can yield four to five fruits, each weighing up to 5 pounds, in just 90 to 100 days. This winter squash stores well but should not be harvested until it has become a dull-tan and you cannot indent the rind with your fingernail. Storage temperatures around 50°F and low humidity will increase shelf life up to three months. You can also enjoy butternut squash roasted or pureed.



Butternut squash makes a delectable soup.
©Veronique, CC BY-SA-2.0.

—Mack Johnson



Crunchy kohlrabi tastes sweet. ©Anita Martinz, Klagenfurt, Austria, CC BY-2.0

Incredible Edibles: Kohlrabi

Sometimes called "stem turnip," this old-time vegetable is unfamiliar to many gardeners. A fast-growing member of the Brassica family, kohlrabi can be grown in the spring and fall. Its unusual growth habit makes this vegetable an eye-catching specimen for the kitchen garden. The edible portions of the plant are the swollen stem just above the soil level and the small leaves with long petioles that sprout out of the top of the bulb. Harvest bulbs that are 2 to 3 inches in diameter while the flesh is tender and sweet. The crunch of raw kohlrabi is a great addition to a crudité plate or salad. Kohlrabi tastes similar to cabbage and can also be enjoyed lightly steamed or roasted.

Use transplants for spring gardens and direct-seed eight weeks before the first frost for fall gardens. Kohlrabi benefits from a rich organic soil. Keep the soil moist over the growing period to ensure tender flesh development. Plant four to five plants per person to supply plenty of delicious and nutritious kohlrabi for your table.

—Mary Jac Brennan

Sustainability: Herbicide residue

If your tomatoes and beans have curling, cupped, and stiff leaves, they may have been exposed to tiny amounts of residual herbicide from the compost, manure, or straw you added to your garden. Certain herbicides used to kill broadleaf weeds in pastures can break down slowly and cause problems for home vegetable growers. Laboratory analyses for herbicides are expensive, but you can do your own "bioassay" to determine if your compost contains any residual herbicides. Take six 4-inch pots and fill three with commercial potting soil. Fill the other three with half potting soil and half compost (or manure). Make sure your compost or manure is a mix from random places within the pile to ensure a representative sample. Plant bean seeds if it's summer time or pea seeds if it's cool weather. Three seeds per pot is sufficient. Water and let them grow until they have at least three sets of true leaves. If you see abnormal leaves on the plants grown in the compost mix but those grown in the potting soil are normal, you are likely to have trace amounts of herbicide in the compost. If both groups are normal, other causes for leaf curl and cupping can include herbicide drift, insect damage, or viral infections. For more information on this bioassay and what to do if you have residual herbicide in your compost, see content.ces.ncsu.edu/herbicide-carryover.



Curling leaves? Bioassay for herbicides.
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—Jeanna Myers