



Helping Carolinians Increase Their Knowledge of Gardening, Manage Their Landscape Investment & Protect the Environment

JC Raulston Arboretum Plant Focus

Spicebush Provides Fall Color and Fragrant Scent

The name spicebush brings to mind fragrance and, in fact, the plant is named for its spicy scent. The Northern spicebush, *Lindera benzoin*, is a fairly common large shrub, sometimes a small tree, that is found on northern slopes, river bottomlands and woodland streambanks in scattered locations from Florida to Canada.

Spicebush is dioecious and spreads slowly by suckers. It reaches a height and spread of about 10 to 20 feet and when used in the landscape is a good shrub for the border or for natural areas. Besides being extremely fragrant, the brilliant scarlet fruit of the female plants is eye-catching in the autumn landscape. The foliage is a favorite of the spicebush swallowtail caterpillar.

For best landscape performance, situate spicebush in a semi-shady spot in moist soil. *Lindera* is difficult to transplant because of a coarsely fibrous root system, and it is somewhat slow to re-establish.

There are 80 other species of *Lindera*, some evergreen, others tardily deciduous, and praised by such plantsmen as the late J.C. Raulston. *Lindera glauca* and *L. angustifolia* have spreading habits with blue-green leaves in summer. The narrow, elliptic leaves change to brilliant shades of yellow, apricot and crimson in fall. The foliage then changes to tan and persists on the plant through the winter, giving the shrub the appearance of a small beech tree. *Lindera glauca* has yellow flowers in early spring that are followed with black, pearl-sized fruit in the fall. Birds find this fruit very appealing, after it matures in September.

The *Lindera* collection at the JC Raulston Arboretum is impressive, numbering over a half dozen throughout the grounds. One of the most striking is the *L. angustifolia* specimen within the Winter Garden; its fall color is a beacon of brilliance and a harbinger of the impending seasonal beauty within this garden.

Karen Neill



Lindera strychnifolia
JC Raulston ©

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Lindera salicifolia
Bryce Lane ©



Lindera salicifolia
Bryce Lane ©



Lindera salicifolia
Robert E. Lyons ©



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Black Tupelo

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Dwarf Fothergilla

Robert E. Lyons ©

Flowering Dogwood

Fall Planting Guide

To many, fall is the most beautiful time of the year with its painted landscapes. It is a time of harvest and maturing of the garden. To the gardener, it also is a season full of activity, including planting and preparation for the winter rest. To plant in the fall requires that you are patient and able to appreciate delayed gratification.

Most nursery plants are great candidates for fall planting. They usually have well-developed root systems, and they like the cooler air temperatures. Trees and shrubs planted in the fall usually perform better the following year than trees and shrubs planted in the spring. Fall planting allows them to put their energy into establishing a root system due to the still-warm soil, without having to produce flowers and new leaves. During the fall, most trees and shrubs are entering their dormant period so they do not experience as much transplant shock. When spring arrives, these newly planted trees and shrubs are ready to get a jump on growing lush foliage and blooms.

When selecting plants, keep in mind that smaller plants establish themselves faster than larger plants. It's tempting to select larger plants, but often the smaller ones are better choices.

Complete a soil test to determine the pH of your soil and the nutrient requirements. Prepare your soil by tilling a planting bed and adding compost or organic matter. Do not add sand or peat moss to clay soil.

Right Plant, Right Place

Select the right trees and shrubs for your landscape. Choose healthy plants. The stem, foliage and bark should look healthy. Avoid plants that are damaged or have insect or disease problems. When possible, look at the roots. Plants should have well-developed roots that are white and not encircling the root-ball.

Answer These Questions When Considering a Plant

When considering a plant, answer these questions to help determine whether the plant is the right one for your site.

- What is the plant's mature height and spread?
- Does the plant need sun or shade?
- Does it flower?
- When does it flower?
- What type of maintenance will be required?
- What are the soil requirements?

Transporting Your Plants Home

Do not handle plants by their stems or trunks. Always handle by the container. Do not stand your plants up in the back of a truck since wind exposure during transport home can damage foliage. For transporting in the back of a truck, protect them by laying the plants down and cover them or wrap loosely in burlap or some other cloth. Water the plants as soon as you arrive home.

If you are not planting right away, place them in a location away from sun and wind.



Robert E. Lyons ©

'Crimson Queen' Japanese Maple

Proper Planting Tips

Water the plants prior to planting. Make sure your soil is well drained before planting. Dig a planting hole 3 to 5 times wider than the root-ball but no deeper than the root-ball. Loosening the soil several feet away from the plant will encourage root growth away from the root-ball. Do not plant too deeply; the soil line should be the same as the original soil line or a little higher. Gently fill the hole with soil removed from the hole until the hole is half filled and then water slowly to remove any air pockets. Finish filling the hole with soil. Apply a 2- to 4-inch layer of mulch and then water slowly and thoroughly.

Do not fertilize this newly planted shrub or tree after planting. Water frequently and slowly (about every 4 days in the absence of rain) until the root system is established.

Contact your local Cooperative Extension Center for more information on fall planting. Ask for *Extension's Successful Gardener* "Tree Planting Guide" or find it at www.successfulgardener.org.

Emily L. Revels

gardentalk

"Autumn is a second spring when every leaf is a flower."

Albert Camus





How do I keep voles from eating my bulbs?

Missing or partially eaten bulbs indicate the culprit is below-ground. This, along with evidence of 1 1/2-inch diameter tunnels, indicates pine voles have invaded your yard. Not only will pine voles eat bulbs, they also will feed on roots of shrubs and trees, either killing or subjecting them to further disease and insect injury. Pine voles may spend their entire lives belowground and within a 1,000-square-foot area. They also are known to come aboveground to feed at night. With a gestation period of 24 days, average litter size of 3, and production of 4 to 6 litters per year, control is challenging, but not impossible.

Before taking control measures, use the apple sign test to confirm their presence and location. This requires establishing bait

stations consisting of a shingle or board placed over vole holes or runways at 15-foot intervals. Five days later, place a 1/2-inch cube of apple under each board or shingle. If the cubes have been chewed or disappear 24 hours later, you'll know where in the landscape to set mousetraps or apply poison bait. To trap pine voles, excavate enough of the runway to allow placing a mousetrap crosswise to the run, and cover with a bent shingle. Bait the trap with a small bit of apple. The alternative to trapping is using chlorophacinone pellets (Rozol). Place 2 tablespoons of pellets under runway covers and repeat in 21 days. Another 21 days later, check for remaining voles with another apple sign test. Be patient and vigilant. These virtues and the procedures described above will prove to be a successful combination. *Mike Wilder*

More About Mulch

It's no secret that mulch provides many benefits to the garden, provided it's used properly. Some people may think it's a mere matter of adding mulch around a plant, but there is more to consider. Have you ever noticed a yard that may have mulch piled up high against the trunks or stems of plants in a way that it is touching the trunks or stems? This is a "mulch volcano," which can stress the stem tissues and may lead to insect, disease and rodent problems.

Some mulches, especially those containing cut grass, can affect soil pH. Continued use of certain mulches over long periods can lead to micronutrient deficiencies or toxicities. A thick blanket of fine mulch can become matted, and may prevent the penetration of water and air. In addition, a thick layer of fine mulch can become like potting soil and may support weed growth. Mulch that is anaerobic or "sour" may give off pungent odors, and the alcohols and organic acids that build up may be toxic to young plants.

It is important to find out if the plants to be mulched might be affected by the choice of mulch. Some plants, such as azaleas and blueberries, may benefit from the use of slightly acidifying mulch such as pine bark. If the mulch is already there, check the depth. Do not add mulch if there is a sufficient layer in place. For well-drained sites, a 2- to 4-inch layer is plenty.

Amy-Lynn Albertson

ENVIRO-TIP

Using Sterile Grass Carp For Aquatic Weed Control

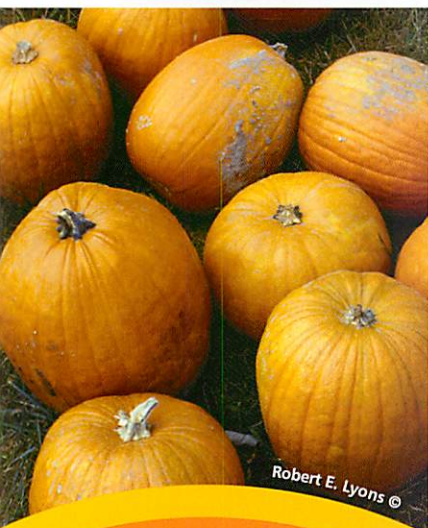
Though plants are an important component of the aquatic environment, they can quickly overrun a pond or lake. Algae and other aquatic weeds can adversely affect fish populations and make recreational activities difficult.

While there are mechanical and chemical techniques for managing aquatic weeds, grass carp can be introduced to eat submersed weeds. Biological control using grass carp is an attractive alternative to herbicides. These sterile, triploid fish cannot reproduce and, therefore, do not create problems in rivers or estuaries. They are selective feeders with a preference for softer textured plants, such as *Hydrilla* and *Elodea*, but will occasionally eat some emergent plants in ponds.

Using sterile grass carp is a cost-effective control method for submersed weeds in small ponds. They are generally less effective on algae and floating weeds. The fish are stocked at 15 fish per acre, with more fish used in larger ponds. No permit is required to purchase up to 150 triploid grass carp for stocking a private 10-acre pond. The fish may be purchased from a licensed distributor.

A permit from the Wildlife Resources Commission is required for larger stockings. A list of distributors, permits and other information is available from this state agency: Wildlife Resources Commission, Chief of Inland Fisheries, 1721 Mail Service Center, Raleigh, NC 27699-1721 or visit www.ncagr.com/aquacult/grasscarp.html. *Toby Bost*





Robert E. Lyons ©

Gardening in October

Lawns

- Remove fallen leaves from newly seeded lawns to prevent smothering new growth. You may allow leaves to fall and mulch into soil on existing lawns.
- Control winter weeds with preemergent herbicides.

Ornamentals

- Do not prune or fertilize your trees and shrubs. This will disrupt their internal process of preparing for winter dormancy.
- It's time to think about purchasing and planting spring bulbs as the cooler weather arrives.
- Fall is for planting trees and shrubs.
- Set out cool weather annuals such as pansies and dusty miller for winter color.
 - Do not forget to plant your fall chrysanthemums to welcome in the season.

- Plan to bring houseplants and tropical plants inside when temperatures dip below 50°F.

Move plants into shade for a week to condition them to lower light levels indoors.

- Do not forget to pick out the perfect pumpkin for a jack-o'-lantern for the kids.

Edibles

- Till garden soil and add organic material and nutrients; the bed will have plenty of time to mellow before spring.
- Plant fall vegetables such as cabbage, broccoli, Brussels sprouts, collards and lettuce. Sow radishes, turnips, carrots, mustard and kale.

Learn More

www.successfulgardener.org

- Oct. 14 - 23, Plant Clinic/Flower Show Tours, State Fairgrounds, Raleigh. Details: (919) 250-1116.
- Oct. 16, 2 - 4 p.m., Gardening for the Environment, Sarah P. Duke Gardens, Durham, call (919) 668-1707 to register.

Diane Ashburn

Make your family room a favorite garden spot this fall by tuning in to "In the Garden with Bryce Lane." Lane hosts this 30-minute, weekly television program with the same enthusiasm and knowledge that has made him a perennially popular teacher in the Department of Horticultural Science at NC State University. Tune in at Noon on Saturdays on UNC-TV and learn how plants grow, plant identification, home landscaping techniques and information and ideas you can use in and around your home.

Lane highlights a plant of the week and this season's show will also include a weekly *Extension's Successful Gardener* tip. Viewers can receive college credit by watching the show. To register, go to www.distance.ncsu.edu. The program for this season began in late August, but actual registration begins November 18 for continuing education students. Tune in and learn – a perfect break from Saturday morning gardening chores!

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