



Extension Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

Winter 2012

Empowering gardeners. Providing garden solutions.

Pruning Your Assets

Our grand magnolias and glorious dogwoods provide a very small sampling of the South's rich natural capital. As with any asset, careful management helps to improve overall health and returns to the investor. Proper pruning is one critical component of landscape management that pays dividends.

February is often mentioned as one of the best months to prune woody plants. While this is often accurate, pruning places stress upon a plant regardless of the time of year. Carefully considering the motives for pruning will help to reduce unnecessary plant stress.

Plants are pruned for five primary reasons: to remove dead, diseased or damaged tissue; to maintain a suitable size; to accentuate aesthetic value; to improve health; or to encourage flowering. The motivation for pruning should not outweigh any other aspect of plant health or value. For example, if pruning a tree to improve driveway access compromises the tree's health, it may be best to remove the tree and replace it with one more suitable for the site.

Once you have clarified why pruning is necessary, identify the plant species that you are working with and research its growth and flowering characteristics. Protecting the next season's flowers is often a priority. If this goal tops your list, determine when the plant flowers. If the plant flowers in the spring, avoid pruning

it until flowering has ended. If the plant flowers in the summer or fall, late-winter pruning is acceptable.

Improving plant health is sometimes a significant concern. In this case, identify the plant's general category: deciduous (loses leaves in the winter), narrow-leaved evergreen (needle- or scale-like foliage) or broad-leaved evergreen (all remaining foliage types). Each of these groups can have very different pruning requirements.

Deciduous plants and broad-leaved evergreens are best pruned in spring before the new foliage emerges. Pruning narrow-leaved evergreens requires knowledge about plant growth. For example, loblolly pines have a whorled branching pattern that can be pruned to only an active lateral branch or pinched during spring's new "candle" growth. Other narrow-leaved evergreens, including junipers, arborvitae, cedars and false cypress, are less picky about the timing but can be damaged or disfigured by heavy pruning.

Proper plant management requires good understanding of why you want to prune and how the plant will respond. Call your Cooperative Extension center for assistance, or see this publication for more information: www.ces.ncsu.edu/depts/hort/consumer/agpubs/ag-071.pdf

— Bob Filbrun

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Prune with a purpose by knowing your plants and their growth habits.



Upcoming Events

January 20 – 21 (10:00 AM – 5:00 PM)

TreeFest Tree Seedling Giveaway

Independence Mall, Wilmington

To find out more, call New Hanover Cooperative Extension: (910) 798.7665

February 4 – 5 (9:00 AM – 5:00 PM, Saturday; 11:00 AM – 4:00 PM, Sunday)

Wilmington Garden Show

Schwartz Center of Cape Fear Community College, Wilmington

Speakers, exhibits, retail sales and more! Tickets are \$7. To find out more, call New Hanover Cooperative Extension: (910) 798.7670

January 12 – March 29 (9:00 AM – NOON, Thursdays)

Wilson County Extension Master Gardener Volunteer Training

Wilson Agricultural Center, 1806 SW Goldsboro Street, Wilson

Application and fee required. For more details, visit our Facebook page at Wilson County Master Gardeners or call (252) 237.0113.

Many county Extension programs conduct **Master Gardener** training in the spring. Contact your local Extension center or visit the NC Cooperative Extension website for county centers to find out about the Master Gardener program and other great opportunities to learn about gardening in your community: www.ces.ncsu.edu/index.php?page=countycenters

Smart Gardening — Trees and hurricanes

Another hurricane season has passed, yet many in eastern North Carolina are still cleaning up from Hurricane Irene. After a storm, people often do not replant lost trees and may remove surviving trees due to fears they will fall in future storms. These fears are leading to losses of trees in coastal communities – an unfortunate trend because trees provide many environmental and economic benefits, including clean air, wildlife habitat, shade and aesthetic value.

Research at the University of Florida has shown that the way we plant and care for trees can make an impact on how well they survive storms. We can use the results of these studies to improve the storm resistance of our trees.

Plant tree species that have proven to be wind-resistant. Avoid or remove species that have demonstrated poor survival in hurricanes. When a tree falls, plant a new, wind-resistant tree in its space. Good trees for coastal North Carolina that have shown the highest levels of wind resistance include American and yaupon hollies, crape myrtle, southern magnolia, live oak, bald and pond cypresses, and sabal palm. Common landscape trees that have shown the

lowest wind resistance include pecan, tulip poplar, Bradford pear, Chinese elm, Leyland cypress, southern red oak, laurel oak and water oak.

Plant trees in groups. Trees in groups resist wind better than single specimens. Planting five or more trees together in a group provides better wind protection than planting singly or in a line. If you have existing single trees, consider planting additional trees and shrubs close by to boost protection.

Provide good soil and room for an extensive root system. Trees with extensive, healthy root systems are better able to resist wind damage. Compacted soils and high water tables can limit tree root growth. Plant large maturing trees only in locations where there is adequate soil (at least 18 inches deep) for root system development. Avoid damaging the roots of established trees.

Prune properly to promote wind resistance. Proper pruning from an early age promotes tree health and stability by developing a structurally sound form. Poor practices such as topping or removing large branches promote decay and greatly increase the chance a tree will fail during a storm.

—Lisa Rayburn

Food Production — More peas, please!

As food prices increase, many families are looking to their own backyards as sources of fresh, healthy, locally grown vegetables. Many vegetables can be started in late winter for spring harvest. Some of the earliest crops you can plant directly in the garden are garden peas and their relatives: snow peas and sugar snaps.

Peas grow best in well-drained soil that is not too acidic. In coastal areas, peas can be planted outside as early as mid January. Even away from the coast, peas should be planted by the first of March to ensure they have enough time to mature before hot weather sets in.

Soaking seeds in water for 6 to 8 hours immediately before planting will help them germinate faster. *Rhizobium* species inoculant, a natural bacterium that helps peas and other legumes convert nitrogen from the air into a form plants can use, can be added to seeds before planting. To apply inoculant, simply

pour some into a bag, add the presoaked seeds and shake the bag until the seeds are coated. In the garden, plant seeds about an inch deep and an inch apart. Although some cultivars can get by without a trellis, they will do better with pea fencing or twiggy branches. Other cultivars need 5 or 6 feet of support.

Fresh peas will be ready to harvest in 65 to 80 days after planting. When the pea pods swell, they are ready to be picked. Pick a few pods every day near harvest time to determine when the peas are at the proper stage for eating. Peas are of the best quality when they are fully expanded but immature – before they become hard and starchy. Peas should be picked immediately before cooking because their quality and sweetness deteriorates rapidly.

High fertility will cause excessive vine growth and poor yields, so be conservative with fertilizer applications.

—Susan Brown

Garden Spot — *The Children's Secret Garden*

If you have never been to the Wilson Botanical Gardens or if it has been a while since you visited, now is the time to come and experience our newest project, the Children's Secret Garden. Located in a shaded area set 8 to 10 feet below the elevation of the nearby parking lot, the Children's Secret

Garden focuses on providing experiences for young children to learn how plants are a valuable part of our everyday life. Different garden areas, plants, hardscape and water features provide opportunities to integrate play with a respect and appreciation

for things that grow. Plants with bold foliage and plants that hide delightful secrets of flower, texture or seasonal change dominate this garden.



©Wilson Botanical Gardens

The Children's Secret Garden is divided into several sections, some of which have been completed. Others will be created as funding becomes available. Already finished are the tree house and a ground-level outdoor covered classroom. The outdoor classroom features a rain

wall that continuously waters an adjacent "meat eater's" garden, which contains a collection of carnivorous plants. Future planned areas include a banana-split sundae garden, music court, labyrinth and bog garden.

The Wilson Botanical Gardens are located at 1806 SW Goldsboro Street in Wilson. The gardens are open dawn to dusk, 365 days a year, free of charge. Visit us online at www.wilson-co.com/arboretum or join us on Facebook at Wilson Botanical Gardens.

— Cyndi Lauderdale

Environmental Stewardship — *Eco-friendly landscaping*

Going green does not have to be a burden, especially when you slowly introduce simple changes to your gardening routine. Here are a few eco-friendly recommendations to get your garden off to a sustainable start in 2012.

Recycle and reuse. A great way to recycle with little effort is to practice grass-cycling by leaving grass clippings on your lawn after you mow. Clippings can generate up to 25 percent of the lawn's yearly fertilizer needs and can help reduce the amount of time and money you spend fertilizing your lawn. Nutrients produced by grass-cycling are slowly released, reducing the chance for runoff and leaching.

Conserve water. Switch to drip irrigation in your landscape and garden. Drip irrigation systems use 50 percent less water than sprinklers and keep plant leaves dry, which helps to prevent diseases. The most efficient time to water is between 10 PM and 8 AM, when the weather is cooler and less windy, which minimizes evaporation.

Apply mulch to your garden beds to prevent moisture loss from the soil, reducing the need to irrigate. When selecting new plants choose drought-tolerant varieties – landscaping with drought-tolerant plants is by far the most efficient and long-term solution to conserving water in the landscape.

Reduce pesticide use. If a particular plant has recurring pest and disease problems, replace it with a more resistant variety this spring. Train yourself to tolerate a little bit of insect damage. If insect feeding becomes a problem, try spot-treating with an organic or less toxic insecticide, such as horticultural oil or insecticidal soap. Decreasing your use of insecticides and increasing plant diversity help promote a healthy garden that will attract beneficial insects and pollinators. Let natural predators – such as lacewings, assassin bugs and lady bugs – do the pest control work for you and make going green easy.

— Karen Blaedow

Tips & Tasks

Winter Chores

Doing these winter chores will put you ahead of the game come spring:

- Plant potatoes in February. Start with certified seed potatoes that can be purchased from most garden centers.
- Prune fruit trees, blueberry bushes and grape vines in late winter before flower buds start to open.
- Sharpen your lawn mower blade and any other tools with blades, such as pruners. Clean tools and wipe with an oily rag to help preserve them.
- Make sure the irrigation on your turf is turned off. Wait until April to fertilize.
- Test your soil; supplies are available from your county Extension center. Don't fertilize now. Apply nutrients in the spring based on soil test recommendations.
- Properly store leftover chemicals in a location that will not freeze. Make sure nothing is left out for pets or children to get into.
- Summer-flowering shrubs (such as butterfly bushes, Knockout® roses and Japanese spirea) should be pruned in late winter before new growth begins.
- To prevent losing this spring's blossoms, wait to prune spring-flowering shrubs until after they have finished blooming. These include azaleas, camellias, Indian hawthorn, and oak-leaf hydrangea.

—Charlotte Glen

Camellia 'Winter's Charm'



Sustainability

Build and Maintain Healthy Soil

The secret to gardening success is in the soil. Many areas where we garden are deficient in nutrients, stripped of topsoil and compacted. Simply digging a hole and sticking a plant in it usually results in failure. Learn what your soil needs through soil testing. Find out how at your local NC Cooperative Extension center. Test results will tell you if lime or nutrients are needed and in what quantities. No matter what you are growing (flowers, fruit, lawn, shrubs, trees or vegetables), plants will do better grouped in beds of well-prepared soil. Dig or till the soil 6 inches deep, add 2 to 3 inches of compost and work the compost in. Add a couple of inches of organic mulch after planting and when the mulch thins to stabilize soil, prevent weeds, feed the soil and conserve water.

— Danny Lauderdale

Pest Alert — Eastern moles

The eastern mole causes a lot of anxiety in Carolina lawns. We all know what mole runs or tunnels look like: ridges in your lawn 1½ inches wide. These tunnels can run for tremendous distances. According to Florida Extension specialists, moles can tunnel up to 18 feet an hour! All this tunneling is a search for food. Moles feed on insects, grubs and even earthworms.

Most of the visible damage moles do is from disturbing the roots of grass plants. Because so many of us spend lots of time and money on our lawns, mole damage is, at the least, worrisome. So what can we do? First, decide if the damage is severe enough to warrant control. A

Showstopper — Winter series camellias

Would you like to grow camellias but fear they can't handle winter weather? Choose varieties from the "winter series." Thanks to advancements in breeding by William Ackerman of the National Arboretum, camellias are not out of reach for gardeners in the NC mountains. The winter series includes dozens of varieties. The most popular cold-hardy cultivars have the word "winter" in their names – including 'Winter's Interlude', 'Winter's Star', 'Winter's Waterlily' and 'Winter's Charm'. Others such as 'Pink Icicle' and 'Snow Flurry' are equally tough. These cherished southern evergreens can be enjoyed in gardens further west and north in USDA Hardiness Zone 6. Camellias prefer partial shade and well-drained acidic soil. Some cultivars will flower as early as October. Most bloom from November to January when nothing else is in flower. Wow – they have to be showstoppers!

— John Vining

Edibles — Microgreens

Microgreens are unique specialty crops grown for garnishes or to add flavor and color in salads and other dishes. Lacking any legal definition, microgreens are vegetable plants harvested once they reach the first-true-leaf stage. Typically the greens are harvested when plants are 2 inches high with the stem, cotyledons and first true leaves still attached. Microgreens are planted densely to maximize production. They can be grown in seeding trays or beds in fine-textured media with good drainage. Little to no fertilizer is required. Depending on the vegetable variety, most microgreens are harvested one to three weeks after seeding by cutting them with scissors just above the soil line. They are highly perishable and should be refrigerated immediately after harvest. Popular microgreens include radish, cabbage, kale, beet, mustard and Swiss chard.

—Howard Wallace

single run is not a signal to bombard your soil with a pesticide. Even if you have a single run, the mole may not be feeding on grubs. Another favorite mole food is earthworms. Realize, too, that mole activity is not all negative. Moles help to aerate heavy soils, allowing air, water and humus to penetrate deeper into the soil. They also feed on grubs that feed on roots of grass plants.

If you decide that the damage is unacceptable, there are many ways to manage mole populations. For more information, check out the NC Cooperative Extension wildlife specialists' management site: www.ces.ncsu.edu/nreos/wild/wildlife/animals/mammals/moles.htm

— Jeff Rieves

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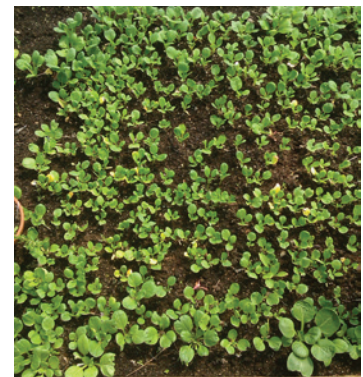
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Microgreens are planted densely and harvested early.
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