Extension Gardener

NC STATE UNIVERSITY NORTH CAROLINA COOPERATIVE EXTENSION Winter 2012

Empowering gardeners. Providing garden solutions.

in this issue

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

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

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Upcoming Events

Learn Beekeeping 101 series
January 24 – March 20
(7:00 – 9:00 PM, Tuesdays)
715 Cabarrus Avenue West, Concord
$43 for series
http://onlineservices.cabarruscounty.us/ReservePartner/
Select Cooperative Extension 2012, Horticulture and class 5103.
bhlewis@cabarruscounty.us or (704)920.3315

Durham Garden Forum
January 17 (6:30 – 8:00 PM), **A Garden of Moss**
February 21 (6:30 – 8:00 PM), **Great Perennials for the Garden Bed**
March 20 (6:30 – 8:00 PM), **Herb Gardening**
Sarah P. Duke Gardens (Doris Duke Center), 420 Anderson St., Durham
$10 per lecture or $25 for Durham Garden Forum membership through April 2012
durhamgardenforum@gmail.com

Grow Your Best Vegetable Garden
February 6 (6:30 PM)
Kathleen Clay Edwards Library, 1420 Price Park Road, Greensboro
February 16 (6:30 PM)
Bur-Mil Wildlife Education Center, 5834 Bur-Mil Club Road, Greensboro
February 21 (6:30 PM)
Cooperative Extension, 3309 Burlington Road, Greensboro
February 26 (4:00 PM)
Greensboro Arboretum Education Bldg., 401 Ashland Drive, Greensboro
pamela_marshall@ncsu.edu or (336) 375.5876

7th Spring Herb & Plant Festival
April 14 (8:00 AM – 5:00 PM)
Piedmont Farmers Market, 518 Winecoff School Road, Concord
Vendor applications being accepted: $25 for lawn spaces, $35 for sheltered spaces.
bhlewis@cabarruscounty.us or (704) 920-3315

Smart Gardening — *Timing is of the essence*

Planting, fertilizing, pruning and applying pesticides are activities for which timing can mean the difference between success and failure or help and harm. Planting calendars (such as www.ces.ncsu.edu/depts/hort/hil/ag-06.html) are handy tools for deciding when to plant vegetables. Timing is important for perennials, too. With enough care, containerized plants can survive when planted just about any time of year that the soil isn't frozen. Bare-root plants should be installed when they're dormant. Late fall and early winter are recommended for planting balled-and-burlapped plants.

The timing of fertilizer application is important, too. Lawns should be fertilized when they're actively growing. If turfgrass is fertilized when not actively growing, the fertilizer will feed the weeds that are growing. And nitrogen may leach into groundwater if there isn't enough vegetation to use the nitrogen. Fertilizing tall fescue in the spring can contribute to brown patch problems. *Carolina Lawns* gives specific recommendations about when to fertilize different turfgrasses: www.turffiles.ncsu.edu/PDFFiles/004175/Carolina_Lawns.pdf

With respect to pruning, improper timing can result in at least two concerns. If you prune plants that flower in the late winter or early spring while they're dormant, flower buds will be removed. So prune such plants after flowering. Plants that flower during the summer or fall can generally be pruned while dormant because most flower on new growth. Pruning can encourage plants to grow, so substantial pruning in late summer may result in growth that doesn't harden off before winter.

The best timing for herbicides, insecticides, fungicides and other pesticides will depend on the pest's lifecycle. If you have annual weeds (such as chickweed, henbit or crabgrass) and plan to spray them, do it while they're small and before they've developed seeds. Likewise, if you've had fire blight problems on apples or pears and plan to spray, the time to apply streptomycin is during bloom, before it rains. Once you see new occurrences of the burnt-looking "shepherd's crook" at the ends of new growth, the time to spray has passed.

For more information about when to do what in the garden and lawn, visit www.ces.ncsu.edu or contact your local Cooperative Extension center. — *Mary Helen Ferguson*

Food Production — *Winter vegetable planting*

Winter is a good time to start planning your vegetable plantings. Think of the planning stage as very important! Organize vegetables by seed-starting dates for the transplants and then transplanting dates, or by direct seeding dates. Many vegetables are ready to plant six weeks from seeding.

Asparagus crowns are one of the first vegetables to go into the soil. Plant 1-year-old crowns at the bottom of a 6- to 9-inch furrow. Cover them with only 1 to 2 inches of soil at planting. As the asparagus grows, slowly add more soil until the trench is filled. Onions can be planted in January and February when soil conditions are favorable. Transplants are best for growing large, sweet dry-bulb onions. Green or bunch onions can be grown from sets or seeds.

Head and leaf lettuce transplants can be planted starting in February. Be sure to harden off the transplants. Once planted, lettuce is usually very tolerant of temperatures down to 20° to 25°F. Direct-seeded lettuce needs to be sown very shallow, even leaving some seed uncovered. Garden peas and peas planted for edible pods can be planted in cool weather and tolerate frost well.

Many gardeners like to plant carrots in the winter. Although carrots are fairly tolerant of frost, small carrot seedlings cannot handle hard freezes. Carrots seedlings with less than six leaves and roots less than 1 inch in diameter are more susceptible to cold injury. The soil temperature should be at least 40°F for carrot seed germination.

Get ready to plant many other cool-season vegetables starting in late February and March, such as horseradish, rhubarb, beets, broccoli, cauliflower, turnips, leeks, collards, cabbage and potatoes. Windbreaks, mulches, row covers and high tunnels can be used to increase the success of early vegetables.

— *Kathryn Holmes*

Garden Spot — *Pollinator Demonstration Garden*

Honey bees and native bees are critical to our food supply and pollinate about a third of the foods we enjoy. Bees and other pollinators are also essential components of the ecosystems that wild animals rely on for food and shelter. As natural areas are cleared, pollinator habitat is destroyed or fragmented, resulting in the loss of foraging, nesting and egg-laying sites. This can lead to a decline in pollinator populations.

©Debbie Roos

Pollinator gardens provide valuable forage and nesting habitat throughout the year, particularly from early spring to late fall, with overlapping bloom periods. Chatham County Cooperative Extension Agriculture Agent Debbie Roos created a Pollinator Paradise Demonstration Garden in Pittsboro to teach local residents how to increase biodiversity in their landscapes and attract the greatest diversity and number of pollinators. The garden has become an important part of the community and has inspired many residents to create their own pollinator havens.

This public garden is maintained organically by Roos and a crew of volunteers and includes more than 140 different species and cultivars, 85 percent of which are native to the NC piedmont! The garden has its own website that includes a plant list, photos of what's blooming, a tour schedule, Web resources for continuing education and more. For more information, visit www.protectpollinators.org and select "Chatham Mills Garden."

— Debbie Roos

Environmental Stewardship — *Composting*

Producing compost – or "black gold" as it's known to gardeners – yields a big return with little investment. That's because nature does most of the work.

Microbes are nature's recyclers and the workhorses behind successful composting. They occur naturally in organic material, so there is no need to add commercially available compost starter. Microbes work best when they have adequate oxygen and moisture.

Turning compost regularly (about once a week when it's warm outside) will allow oxygen to reach the center of the compost pile and result in a uniform finished product. The compost pile should also be kept moist. Add water to the pile as needed so that compost is the consistency of a wrung-out sponge.

Many types of organic material can go into a compost pile, but some things should be avoided, such as meat, bones, dairy products and diseased plants. Compost piles should include both brown (dead leaves and twigs) and green material (grass clippings and kitchen waste). Brown material supplies carbon, and green material supplies nitrogen, both of which are essential for microbes to work efficiently. Shredding materials before they go into the pile will accelerate the composting process, but shredding is not essential.

The composting process generates heat. If you dig to the middle of a pile, it should feel hot. Compost is ready to use when it has an earthy smell and the center of the pile cools off. Compost can be spread on top of soil to conserve moisture. It can also be tilled in to improve soil structure and increase nutrient retention. Reap the benefits of compost by starting a pile today. After all, nature will do most of the work.

For more on this topic, check out *Composting – A Guide to Managing Organic Yard Wastes*: www.ces.ncsu.edu/depts/hort/hil/pdf/ag-467.pdf

—Amanda Taylor

Tips & Tasks

Weeds

- Winter annuals such as henbit and chickweed should be controlled early in the season before they produce a large number of seeds. Broadleaf herbicides that contain 2,4-D and dicamba will work well to control henbit and chickweed.

Lawn Care

- Cool-season lawns should be fertilized in mid February with 1 lb of nitrogen per 1,000 sq ft. A soil test will tell you if you need a complete fertilizer like 10-10-10 or if you only need nitrogen. Using a nitrogen fertilizer such as 34-0-0 can save you money and help reduce the amount of phosphorus and potassium added to the environment.

Ornamentals

- February and March are good months for pruning. Broadleaved evergreens like hollies that have gotten overgrown can be cut back severely and will fill out nicely in the spring.
- Do not prune azaleas, forsythia, quince and other spring-flowering shrubs at this time. Pruning spring-flowering shrubs now will reduce their blooms.

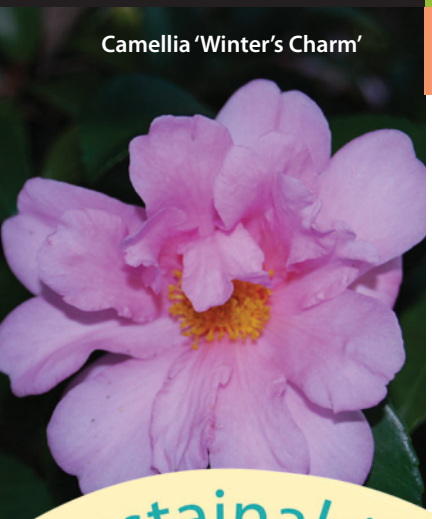
Edibles

- Broccoli, cabbage, lettuce and other cool-season vegetables can be planted in the garden in late February and early March. Row covers can be used to protect tender plants from frosts and encourage growth.

—Mark Daniely

Extension Gardener

Around the State



Camellia 'Winter's Charm'

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

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

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

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 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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Microgreens are planted densely and harvested early.
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