

WINTER 2018

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Extension Gardener provides timely, research-based horticultural information. We publish four issues per year. Send comments about *Extension Gardener* to:

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Landscape Need a Change? Plan on Paper First!

The junipers are blocking the living room windows, the shade tree in the backyard has more dead branches than live ones, and the privet you planted years ago as a screen is out of control (and not to mention invasive). Sound familiar? If so, your home's landscape may need renovation. You may have realized this long ago, but you've been hesitant to do anything about it because you just don't know where to start.

Start with paper and pencil. If you start your assessment on paper, you can eliminate a lot of hard work and discover ways to make needed changes with minimal time and money. Make a large-scale drawing of your house and permanent features (such as driveways, patios, sidewalks, and sheds).

Once you have that done, assess the existing environmental and plant conditions. Tape tracing paper over the plan, and sketch in all existing plants. Make plant and environmental notes (including shady areas, prevailing wind direction, and wet spots), and make notes about plant-related problems, hazards, and aesthetic or visual problems.

Decide what you want to save. Once you have the scale drawing with the assessment of the current landscape, start your renovation plans. Use another sheet of tracing paper over the base plan and the assessment overlay. Draw in those plants you feel should stay, either in their existing or different locations. Make a list of what you



Before: The previous owner had a hedge of privet along the street as a screen. Privet is an invasive plant that comes up from seed everywhere and requires pruning every four to six weeks during the growing season to maintain. ©Debbie Dillon



After: I removed the privet hedge and planted blueberries along the street, anchored by an evergreen holly on each end. Space between the blueberries and a new garage is used for a small vegetable garden. ©Debbie Dillon

want in your landscape in the future (such as less turf, more parking space, a swimming pool). Compare this list with the overlay that shows the plants you hope to save. Now you are developing your new landscape design.

Install permanent areas first. Once you have a completed design, decide how much can be done at a time. Renovation may take several years. If possible, complete construction and hardscaping first so that plants won't be damaged as permanent structures are installed.

Use the overlay showing which plants to remove or move, and do that work. As time and money permit, add the new plantings. Then repair any lawn areas that are poor or were disturbed during the renovation. As the work progresses, adopt the proper cultural techniques to keep the new landscape growing at its best. Learn from past mistakes and capitalize on things you've done correctly.

All gardens are in a constant state of change, so keep your drawings, and work from them in the future. When I recently sold a home, I passed my drawings and plant information along to the new owners. Now that I am in a new home, I have completed an assessment of my new landscape, which I am converting to include as many native and pollinator-friendly plants as I can.

—Debbie Dillon

Extension Showcase

Join the spirit of learning by doing

The Catawba County 2018 Extension Master Gardener Volunteer (ncemgv.org) training course will include the first annual Master Gardener Western Piedmont Pest Test Challenge on April 4 from 1:00 to 4:00 PM. This challenge will include participants from Catawba, Lincoln, Caldwell, Alexander, and Iredell counties.

We are currently developing a list of weeds, insects, pests, diseases, and disorders. From that list, we will host a series of challenges based on identification, suggested management, and client interaction.

The challenge activities will include pest bingo, live specimen identification, picture recognition, mock customer interaction, and a “Jeopardy” showdown (with buzzers) for the top teams.

Although pests will be the main focus, there will also be additional hands-on challenges—such as drip irrigation set-up, explanation of how to take a soil sample and interpretation of soil analysis results, basic pruning recommendations, and finding information on product labels.

Pest Test Challenge is not only for building skills and confidence with our Extension Master Gardener Volunteers; we also want to strengthen the regional community of gardeners.

Contact us if you are interested in participating. If you have any additional ideas for challenge activities, we would love to read your suggestions and experiences. Please send them to us via email: gtplace@ncsu.edu.

—George Place

Smart Gardening: Prepare for next year

It may be winter, but many chores still need to be done in readiness for the upcoming growing season. Getting a jump on possible issues in next year’s garden can only result in fewer problems, so let’s talk about some things you can do now. Was the performance of the lawn less than stellar last year? The cause could be lots of things, but doing a simple soil test can give answers and should be the first step towards fixing the problem. A soil test will give you the pH of your soil with recommendations that can adjust the acidity of the soil, making nutrient take-up more efficient. You can get the materials to do a soil test at your **county Extension Center**, and an agent will be available there to discuss your lawn needs.

Winter weeds are up and growing. The smart thing to do is get rid of them now while they are young and have not dispersed seeds. This can be done chemically or by hand-pulling. Check the flower beds and vegetable garden also, and deal with these pesky weeds before they do their damage. Many weed seeds and disease organisms overwinter in vegetable refuse, so it is a good idea to clean dead plants from the vegetable garden. Tilling up the vegetable garden site can also kill overwintering insects and seeds by exposing them to cold temperatures. Let’s talk about seed catalogs. Now is when they start piling up in our mailboxes, and the winter is an excellent time to start planning next year’s projects. Choose carefully, looking at hardiness zones and insect and disease resistance. Smart gardeners use this time of year to think about last year and to make changes for better outcomes.

—Donna Teasley



Smart gardeners use the winter wisely. ©Donna Teasley

Food Production: Easy-to-grow garlic



Garlic can winter over and produce bulbs next spring. ©Howard H. Schwartz, Colorado State University, Bugwood.org

If you’re a garlic lover, consider incorporating this easy-to-grow crop into your rotation. Plant garlic this fall (October to December) for an early summer bulb harvest. Garlics are classified into hardneck and softneck varieties. Hardneck varieties produce an edible scape midspring. The scapes are cut for eating and to encourage bulb development. Each scape is an umbel—a reproductive body bearing clonal bulbils or sometimes a flower. Softnecks do not often produce scapes, but they can be braided for storage or decoration. Select cold-hardy softnecks and heat-tolerant hardnecks for the foothills, and hardnecks for the mountains. Elephant garlic (*Allium ampeloprasum*) is not a true garlic. Its large cloves are easy to work with, but the flavor is not as strong as that of true garlic. Most cultivated garlics do not produce true seed, so cloves are planted to generate new bulbs. Purchase cloves from a garlic seed grower to avoid diseases that may infect garlic purchased at a grocery. Separate cloves just before planting, and plant each clove point-up, 2 to 3 inches deep, spaced 2 to 6 inches apart. Plan to weed garlic often, or mulch with straw. Incorporate fertilizer and organic matter according to soil test recommendations ahead of planting. Consider a light nitrogen fertilizer application at “green-up.” Do not apply fertilizer after May. Harvest garlic when five to eight green leaves remain on the garlic plants. Harvest elephant garlic when 30 percent of the foliage turns yellow. To cure garlic, knock off extra soil, but do not wash the harvest. Leave the foliage and stem on and store in a well-ventilated place out of reach from rain or dew for several weeks. Then, remove the dirty layer of wrapper and trim the roots. Softnecks can be braided at this point. For elephant garlic and hardnecks, cut tops to 2 inches above the bulb. Keep cloves from the largest bulbs that are completely disease-free for replanting.

—Elina Snyder

Pest Alert: Brown marmorated stink bug

We are all familiar with pesky stink bugs, but have you heard about the brown marmorated stink bug (BMSB)? Chances are, if you haven't yet, you will soon. It has been spotted in all of the western North Carolina counties.

In late summer to early fall (September to early October), you may have noticed a large infestation of the insects moving their way inside to overwinter in warm areas in your home. The stink bugs head back outside in April and May to lay eggs on host plants for the summer season. Some examples of host plants include the tree of heaven (*Paulownia* species), wild cherry, catalpa, black walnut, dogwoods, and maples.

Around June or July, the nymphs and adults make their way to fields where fruits grow in early summer, and then eventually to soybeans later in the season. The stink bugs prefer warm conditions. If conditions are right, they will produce a second generation of adults before fall arrives.

Work is being done by entomologists to determine treatments, predators, and best ways to prevent and eradicate this pest. For now, you can help by reporting your sightings online at the **NC State BMSB survey**.



Brown marmorated stink bug (*Halyomorpha halys*).
©Mohammed El Damir, Bugwood.org

— Hannah Bundy

Lawns: Winterize lawn equipment

The temperatures outside are dropping as a new season approaches. For many of us, the chores of frequently mowing and trimming our lawns have begun to wind down, and we are looking forward to storing our equipment for the season. Before you park your mower in the shed, keep these maintenance tips in mind.

Take advantage of some down time for your mower, and remove, clean, and sharpen the mower blades. Check the oil and run the gas out of the engine for winter storage. After a full season of use, your mower's air filter needs to be cleaned to remove dust and debris. Remember to check belts and fittings to ensure that they fit properly and are in good condition.

String trimmers usually take a beating during the growing season. So before storing, clean the inside of the deflector or guard to remove grass buildup, disassemble the cutting line head and remove any debris that is caught, and use up any remaining fuel in the tank. Hedge trimmers should be cleaned and sprayed with lubricant before being stored for the season. Check and replace spark plugs if necessary, and store all equipment somewhere out of the weather. Taking some time to prepare for winter storage can help you extend your equipment's life and save you some hassle and headache when it's time to pull it all back out again in the spring.



Make sure lawn equipment is lubricated and in good condition before storing it for the winter.
©romarti, bigstockphoto.com, ID 97106099

— Sarah Scott

Tips & Tasks**Lawn Care**

- Continue to mow as long as grass is growing.
- Warm-season grasses: Avoid fertilizing with nitrogen in fall or winter to minimize winter injury.
- Cool-season grasses: Fertilize again in March.
- Apply crabgrass preventer as early as mid-February.
- Winterize power equipment and sharpen blades before storing for the winter.

Ornamentals

- Wrap vulnerable shrubs in burlap when frigid weather occurs. Use white plastic to protect shrubs from wind.
- Hardwood cuttings can be taken (including forsythia, crape myrtle, and hydrangea).
- Prune shade trees, such as oak, hickory, beech, and sweet gum, in January. Do not prune maple trees.
- Use only plant-safe de-icer products.
- Prune ornamental grasses and summer-flowering shrubs and trees in February.

Edibles

- Plant one-year asparagus crowns in December.
- Prune out a third of the oldest canes on mature or overgrown blueberries, or prune at ground level in February.
- Prune fruit trees, muscadines, and other grape vines in February.
- Mulch strawberries with pine needles or straw in December.
- Start looking through seed catalogs and making plans for next year's garden.

—Donna Teasley

Helping You Grow

Holiday Help

What can you do when your mother-in-law insists that you purge your house of poinsettias to spare the life of the grandkids?

Or when the cousins are fighting over whether a yam is just a sweetpotato, or if “sweet potato” is one word, or two?

And what can you do if your sweetie doesn't believe that mistletoe really does mean he or she is supposed to kiss you?

What if you are terrified that the sap from the pine tree cuttings your teenager just used to decorate your 200-year-old family heirloom credenza is going to destroy the finish?

Well... you do what everyone should do at the holidays: Turn to Cooperative Extension for answers.

Take a look at your county Cooperative Extension center's website by visiting ces.ncsu.edu/local-county-center/.

—Tom Dyson



©Tom Dyson

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Plant Watch: Rattlesnake plantain



Rattlesnake plantain. ©Tom Glasgow

Rattlesnake plantain (*Goodyera pubescens*) is one of many evergreen herbaceous perennials that become much easier to spot during the winter. This lovely native can be found from the NC mountains to the coastal plain, although I do seem to recall seeing more of these plants back home in the East Tennessee mountains. Rattlesnake plantain foliage is unique for its white, netted venation against a green background. White flowers are borne on tall spikes, as with other members of the orchid family, including *Spiranthes odorata*. If you have wooded property and happen to notice rattlesnake plantain on site, make an effort to preserve it by controlling invasive and highly competitive plants, such as English ivy, Japanese honeysuckle, and Chinese privet.

—Tom Glasgow

Incredible Edibles: Spicy greens

Upland cress, mustard greens, and arugula are hardy, versatile additions to the winter garden and cuisine. Winter or upland cress (*Barbarea verna*), also known as “creasy greens,” adds sharp, smoky flavors to soups or salads. Mustards come in a variety of colors and heat levels beyond the traditional ‘Southern Giant Curled’. Mild mustards such as ‘Tendergreen’, ‘Pac Choi’, and ‘Mizuna’ can be enjoyed raw in salads. ‘Red Giant’ and ‘Chinese Thick Stem’ have excellent cold tolerance. ‘Carolina Broadleaf’ has been bred for resistance to bacterial blight. Plant in a 12-foot row to have enough for a “mess of greens” for company. Arugula has two general types—rocket (or roquette) and sylvetta. The sylvetta type is smoky tasting, and ‘Ice-bred’ is a very productive and flavorful cold-hardy variety. After a frost, allow leaves to thaw before harvesting. Choose varieties selected for cold hardiness, continuous harvest, and overwintering to enjoy their flavors all winter long.



Warm up the winter with spicy greens. ©Elina Snyder

—Elina Snyder

Sustainability: Irrigation maintenance

Installing irrigation equipment or optimizing an existing system and incorporating drought-tolerant plants are great ways to sustain one of the world's most valuable resources. Installing irrigation in your landscape can reduce water use in your garden by directing the water to exactly where plants need it. There are several ways you can improve your existing irrigation system and landscape to make it more sustainable. Improvements include cleaning and winter-proofing your irrigation system, replacing hoses and heads to reduce water waste, and replacing old equipment. Not only will this cut down on water waste, but it can help reduce waterborne disease and pest issues in your landscape. Clean irrigation hoses of debris, remove nozzles on sprinkler heads, and check filters. Doing so allows for better water flow. Tightening heads to emit fewer gallons of water per minute in the winter will also conserve water. Repairing or replacing damaged sections in drip irrigation lines will lessen water loss. Installing rain barrels to collect water from your existing gutter system can meet many of your irrigation needs. Xeriscaping is another way to make your water use in the landscape more environmentally friendly. Selecting plants that tolerate drought, such as grasses and natives, and reducing your lawn square footage can drastically reduce water use. Grasses and native plants adapted to our area's climate may require little water. Reducing your lawn area will help to reduce water use in the landscape greatly. You can replace some of your lawn with native plants and grasses, mulch, stone, and rocks.

—Lauren Hill