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Know Before You Grow

Landscaping is a major undertaking for homeowners, especially when they choose to do it themselves. It can be a great learning experience and a source of pride when the job is done and the gardener can stand back and say, "Look at what I've done." But landscaping can also turn into an overwhelming task with not-so-great results.

There is a simple phrase that I've used when speaking to gardeners who want to take on a new project: Know before you grow. If gardeners take the time to find out about the plants they want to use before installing them in the landscape, many problems could be prevented.

What type of information is important? The plant hardiness zone is one key to a plant's survival in a specific location. A plant that is labeled for the mild temperatures of USDA zone 8 or 9 simply won't make it through a winter in zone 6 or 7. Light and water requirements are also crucial.

Azalea lacebug problems would be virtually nonexistent if azaleas were planted in the shade instead of the sun. It is also important to remember that heat hardiness is just as important as cold hardiness.

Become familiar with the culture of the shrubs and trees to be planted. Look at insect and disease problems, and make a decision beforehand



A formal landscape can involve lots of pruning to keep plants symmetrical and in scale with other landscape elements. ©Roy Ostling, Flickr, CC By-NC-ND-2.0,



Simple landscape plantings with attractive spacing can be just as attractive as complex arrangements. ©JR P, Flickr, CC By-NC-4.0

about the amount of potential pesticide applications you are prepared to make. Is the landscape going to be a formal one where lots of pruning is involved? Think about this: Would you rather be pruning or fishing on Saturday? Are you financially able to pay a landscape maintenance company to do the work, or are you the designated pruner for the family? These are all things that should be planned for when considering a new landscape.

A landscape planting can be amazingly low maintenance when well-researched plans are implemented carefully. Remember that simple is good and can be even more attractive than complex plantings. Learn to read tags and to use proper spacing. This saves many hours of future pruning.

Many gardeners think that they can make a plant into something that it is not. Such a gardener may win for a couple of years, but eventually that plant is going to fulfill its growth potential, whether that is growing in front of a window or out over a walkway.

The *NC Extension Gardener Handbook* includes a chapter on landscape design that offers lots of good advice on planning a landscape: **content**. ces.ncsu.edu/extension-gardener-handbook.

A landscape is an endlessly changing thing, as it should be. It doesn't have to be perfect to be pleasing, but always remember my favorite piece of advice: Know before you grow.

—Donna Teasley

Extension Showcase

WNC Gardening Symposium

You will not want to miss the exciting and impressive lineup of speakers at the 2017 WNC Gardening Symposium. "Gazing into the Future: What's Coming in Gardening" will be held on October 25, 2017, at the DoubleTree Hotel in Asheville, NC

Tony Avent, keynote speaker, is a renowned plantsman and founder of Plant Delights Nursery. Tony will share from his treasure trove of knowledge, experiences, and plant stories about new and unique perennials for the garden.

Tom Ranney, NC State horticulture professor and program leader of the Mountain Crop Improvement Lab, will provide a special presentation on his plant breeding research and highlight exciting plant introductions, including 'Invincibelle™ Spirit' mountain hydrangea and the first ever mophead 'Annabelle' hydrangea.

In addition, Craig Mauney, NC State Extension area specialized agent, will bring his humor and deep understanding of vegetables and fruits. Brie Arthur, author of the newly released book *Foodscape Revolution*, will talk about new gardening methods and technologies.

The symposium fee is \$55, or \$50 if you register before September 19, and includes a continental breakfast, lunch, and afternoon dessert. As always, there will be wonderful door prizes, great vendors, and plenty of free parking.

Attendance for the full day is valid for five hours of continuing education credit for Extension Master GardenerSM Volunteers.

Visit buncombemastergardener.org for more information.

—Alison Arnold

Smart Gardening: Work smarter

We all know the phrase "work smarter, not harder." It holds major importance in our gardening habits as well as in other areas of life. There are some simple ways that you can make your garden work with you as well as for you. First, if you aren't used to gardening or if you don't have much spare time, start small with your garden space and make sure that you don't plant more than you can handle on a daily and weekly basis. This habit will help you learn about what you can manage realistically. If you'd like to grow from there, you always can. Once you have your space established, choose plants with maintenance requirements that you can manage.

Natives and perennial plants tend to require less maintenance than annuals or plants that aren't adapted to our area. Especially in spots where you aren't likely to visit often, install plants that will thrive on their own. The more often you visit an area and inspect your plants, the more likely you are to spot any problems and address them quickly. Scout every few days to catch problems before they get out of hand. Building your soil by adding homemade compost is a great way to reduce both green waste and fertilizer costs while improving plant health. Use mulch to suppress weeds and build soil as it breaks down over time.

Last but not least is the importance of proper watering techniques. Water the soil rather than the leaves, and be sure to apply enough water to penetrate several inches deep. Drip irrigation can be used in many garden areas.

—Hannah Bundy



Mulches can conserve time and moisture. @Donna Teasley, Burke County

Food Production: Enjoy sweet corn all year



Corn should be harvested about 18 to 22 days after all of the silks have emerged. @George Place, Catawba County

This growing season will be one of the best years for sweet corn production in recent history. Unlike field corn, sweet corn is harvested before the kernel matures—about 18 to 22 days after all of the silks (those fine white threads that you see coming out of the developing ear) have emerged. Each of those individual silks will develop into a kernel on the ear of corn but only if it is pollinated by a pollen grain from a corn tassel (the long spike emerging from the top of the corn plant). Pollen from the corn tassel is carried by the wind, so corn needs lots of neighbors to assure that every developing silk receives a pollen grain. This is why sweet corn should be planted in blocks (at least four rows wide) rather than in long single rows. Poor pollination will result in corn ears with lots of missing kernels.

Start checking your sweet corn three weeks after you see the first silks. Harvest the ears while the kernels are plump and juicy. If you wait a few days too long, the sweet juice, called "corn milk," will start to convert to a starchy soft dough. Traditionally, sweet corn that will be stored in the freezer is blanched (put in boiling water for two minutes) to destroy the enzyme that converts sugar to starch. Cutting corn off the cob with knives is effective, but there are circular blades that can be used to speed up the process. If you use a power drill with a long drill bit inserted into the cob of the corn, the corn ear can be rapidly rotated while being pressed in and out of the circular blade. Tilt the corn ear to go through the circular blade at a slight angle for a more complete removal. Freeze the kernels and enjoy sweet corn all year.

—George Place

Pest Alert: Fall webworms

We are fortunate to have plenty of large, beautiful trees here in western North Carolina. But during the late summer and early fall, some of our trees are full of worms—fall webworms to be exact.

Contrary to popular belief, webworms are not tent caterpillars. Tent caterpillars show up in the spring, whereas fall webworms build their nests in late summer and are usually located at the ends of the tree limbs, surrounding clusters of leaves.

Adult moths lay eggs on leaves in June. Larvae hatch and begin feeding and building the nest throughout the summer. Once the caterpillars hatch, they feed for about six weeks before falling to the ground, where they pupate for the winter.

It all sounds and looks worse than it really is. Because larvae feeding happens in late summer, no real damage is done to trees—even when they are defoliated. Sufficient food has already been stored to get the tree through the winter. So the absence of leaves does no harm to the tree, although it looks alarming. Nests can be sprayed with pesticides when they are small. But after the webbing becomes thick, pesticides cannot penetrate the protective covering.

On a cheerier note, consider this: If the leaves are eaten by fall webworms, you won't have to rake as many this fall.

—Donna Teasley



Fall webworm (*Hyphantria cunea*).
©Steven Katovich, USDA Forest Service,
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Lawns: Bare patches in your lawn?

Have you noticed your lawn thinning out? Did brown patch or gray leaf spot leave bare patches in your fescue this year? Fall is a good time to revitalize the lawn. Filling in bare spots this fall will lead to a more pleasing appearance and will reduce weed encroachment next spring. If the lawn has experienced excessive traffic this year or is in a heavy clay soil, consider core aeration to relieve compaction and improve root growth.

Before aerating and seeding, identify the problem that caused lawn thinning. Take a soil test to see if conditions are right for your cool-season grass, and identify and control disease issues that may persist. If core aeration is needed, aerate before fertilizing or seeding. You can rent a core aerator or hire a professional to do it for you. If you do not aerate or are reseeding only small patches, rake bare areas to loosen the soil. Apply lime and fertilizer as needed. Finally, broadcast your seed and rake in or break up the soil plugs if you aerate. This will improve seed-to-soil contact and help germination and establishment of the new grasses.

High elevation residents should seed in August or earliest September. Foothills and piedmont residents can seed in September. A recommended over-seeding rate is 6 pounds seed per 1,000 square feet. Consider applying a starter-type fertilizer at seeding, especially if a soil test was not taken. Recommended varieties can be identified on the NC Turfselect website: turfselect.ncsu.edu/. Avoid core aerating after heavy rains or when the ground is saturated as this can lead to further compaction. If possible, plant before steady rains, or irrigate lightly several times each day with a sprinkler. Filling in those bare spots this fall will get your lawn off to a great start next spring.

—Elina Snyder



©Elina Snyder, Caldwell County

Tips & Tasks

Lawns

- Fertilize cool-season turf, such as tall fescue, using ½-pound to 1 pound of nitrogen per 1,000 square feet.
- Over-seed or reseed fescue lawns.
- Remove fallen leaves from lawns by raking, or use a bag attachment on your mower to mulch them. Mulched leaves make an excellent addition to garden beds and compost piles.

Ornamentals

- Plant spring-flowering bulbs, such as daffodils, tulips, crocus, and snowdrops.
- For winter displays, force flowering bulbs indoors.
- Most trees, shrubs, and perennials can be planted in the fall when temperatures are cooler and the risk of stress on the plant is not as great. New plantings need adequate water until roots are established.
- Dig tender plants like dahlias and caladiums and store in a cool, dry place through the winter.
- Use mulch to insulate tender perennials through the winter.
- Make sure to run the fuel out of your gas-powered equipment before winter storage.

Edibles

- Remove frost-killed annuals and diseased plants from the garden.
- Plant cool-season vegetables in a cold frame to enjoy throughout the winter, including carrots, radishes, and leafy greens.
- Plant garlic in the fall for a July harvest.
- Soil sampling is free from April through November. Collect and send soil samples for analysis.
- Fall is the best time to apply lime if your soil pH is on the acidic side. Follow recommendations on your soil test results.

—Sarah Scott

Helping You Grow

Tools for curious gardeners

Gardeners are naturally inquisitive about the flowers, trees, and berries they can grow. Curiosity helps us select plants appropriate for our landscapes. An interest in plants can eventually stretch far beyond the botanical. You may start to notice the butterflies and bees flying in the garden, perhaps even the different birds eating dried seed heads. Before you know it, you're on your way to becoming a bona fide naturalist.

A naturalist studies the natural world, including birds, insects, trees, mushrooms, and other living species. The key to being a good naturalist is to fully observe the world around you. Luckily, there are some amazing tools to assist you, including apps that can be downloaded onto your phone.

Peterson Field Guides (petersonguides.com) and the National Audubon Society guides (audubon.org/national-audubon-society-field-guides) are two excellent resources that cover a range of plants, birds, and insects.

Another excellent tool is iNaturalist, which allows people to post photos of their field observations at specific locations: inaturalist.org. On a recent trip to Maine, I was able to learn about some of the plants I saw blooming by referencing photos on iNaturalist. We have so many things to watch and learn about in this world, and these tools can assist in building your identification skills.

—Meghan Baker

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Plant Watch: You can't beat kale



'Toscano' kale is full of flavor and texture.
©Jeana Myers

Kale (*Brassica oleracea*) is a very hardy, super-nutritious, and delicious group of vegetable greens we can grow easily in our NC gardens. You can plant seeds in late summer or seedling transplants in September or October. Once the plants are established and growing, you can enjoy them through the winter in salads, soups, smoothies, or stir-fries. The stiff curly-leaved kale variety with blue-green leaves is commonly found in garden centers. A couple of other excellent varieties to try are 'Red Russian' kale, which has bright purple-red stems and leaf veins and a smoother leaf, and 'Toscano' kale, also known as dinosaur or lacinato kale. 'Toscano' kale is slightly less cold hardy than the others, but its crumply-textured and lance-shaped leaves are tender and flavorful. If you don't get them planted this fall, you can put seedlings in next spring and enjoy kale until hot weather arrives.

—Jeana Myers

Incredible Edibles: Wild world of broccoli

Broccoli has been cultivated in some form for the past 8,000 years. It originated on the chalky bluffs of England and has been bred from an ancient relative of cabbage to create the vegetable we all know and love today. Broccoli gained its popularity here in the United States in the early 1900s when scientists discovered that it was loaded with vitamins and nutrients at a much higher rate than its blanched cousin—the cauliflower. Today, broccoli is recognized as an extremely healthy vegetable that is rich in vitamins A and C as well as various anticarcinogens (anticancer compounds). Whether eaten raw or cooked, broccoli can provide benefits to human health, many of which are still being discovered. Broccoli is also easy to grow in the home garden. With a growing season of roughly 90 days, broccoli is ideal for planting in the early spring or early fall. Broccoli that matures during colder evenings will have higher sugar levels and tighter heads. Starting from transplants will allow your plants to grow quickly and provide all of the broccoli you and your family need throughout the year.

—Ben Grandon

Sustainability: Beyond lawns—grasses for your garden

While homeowners are familiar with turfgrasses for lawns, gardeners should consider adding ornamental grasses to their yards. Many native grasses are available that offer benefits to pollinators and wildlife. Not only will the grasses add height and winter interest to your garden; their seeds will provide food and their foliage offers shelter for birds and other wildlife. Once established, grasses can tolerate heat and drought. Many gardeners find that ornamental grasses are easy to care for, with little pressure from insects and diseases. Most ornamental grasses simply need to be cut back in the winter or very early spring. After cutting back grasses, gardeners can add the dried foliage to the compost pile. A variety of grasses are available to gardeners to fit various garden spaces. Taller grasses, including many cultivars of switchgrass (*Panicum virgatum*), can be used to create screens. Smaller varieties, such as 'Little Bunny' fountain grass (*Pennisetum alopecuroides*), add texture to garden beds. Grasses offer color throughout the seasons, from green spring foliage to fall color. Switchgrass 'Shenandoah' offers purple fall color, while big bluestem (*Andropogon gerardii*) and little bluestem (*Schizachyrium scoparium*) add shades of blue. As you visit gardens this fall, take note of the variety of ornamental grasses in North Carolina and consider adding a few to your garden.



Pennisetum alopecuroides adds texture to a garden. ©Leslie Peck

—Leslie Peck