Extension Gardener

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Empowering gardeners. Providing garden solutions.

in this issue

Beautiful food gardens

If your backyard is too shady to grow your own food, but you're concerned that a vegetable garden in the front yard would be messy and unattractive, take heart. With proper planning and effort, you can grow seasonal vegetables that will enhance the entrance to your home—and your dinner plate. Keep in mind three key components: edging, evergreens, and upkeep.


Jeana Myers

First, pay attention to bed edges and keep them clean. Defined bed edges make the garden appear more managed and contained. You can create a clean garden edge with a heavy layer of mulch at the lawn line or by using stone, brick, or wood. Once the edge is defined, a regular run-through with a weed eater will keep that neat appearance.

Another way to define the edges is to garden in raised beds constructed of wood or stone that complement your home in color or form. Blend raised beds into the landscape by planting perennials or small shrubs on the side facing the street. Vegetables can also be grown in attractive pots, but remember that bigger is better for growing vegetables, and containers will likely need daily watering.

Evergreens are the second component to an attractive edible landscape. Because vegetables grow to maturity quickly, die, and are then replaced, there will be times when beds are empty or plants are past their peak. Having evergreen plants and shrubs in place around the garden will hold the structure through the growing season. Rosemary and bay laurel are excellent evergreens for this purpose—and both are edible, too! Adding perennial flowers will tie the whole image together, especially when color, plant height, and flowering time coordinate beautifully with the vegetables.

The final important component of successful front yard gardens is upkeep. Because the vegetables are visible to you and your neighbors, keep dead leaves picked, old plants pulled, and gangly plants staked. A two-inch layer of mulch will keep weeds at bay and reduce your labor. If you grow vining vegetables or tall tomatoes, choose trellises that are sturdy and match the style of your home.

With neat garden edges, supporting evergreen structures, and regular upkeep, you can grow a beautiful food garden in the most public part of your landscape. Share the bounty with your neighbors and it won't be long before they have fresh vegetables gracing their entrances too!

— Jeana Myers


Jeana Myers

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Extension Showcase

The Southern Ideal Home Show

Each year, Extension Master Gardener volunteers help thousands of North Carolina gardeners solve their garden problems. An opportunity for you to ask an Extension Master Gardener is coming up at the Southern Ideal Home Show in Raleigh. During the show, Extension horticulture agents, along with Extension Master Gardeners, work together to staff the Successful Gardener Learning Center, where guests can get answers to their gardening questions. You can also bring samples or pictures of weeds, insects, or diseases to the learning center for identification and control recommendations.

The show takes place twice each year, in the spring and fall, at the N.C. State Fairgrounds, 1025 Blue Ridge Road, Raleigh, NC. The spring show is April 5–7; Friday hours are noon–8:00 p.m., Saturday hours are 10:00 a.m.–8:00 p.m. and Sunday hours are 11:00 a.m.–5:00 p.m. Admission is $9.00. Admission is free for children 14 and under accompanied by an adult. Friday is 55+ day: for those 55 and older admission is $7.00 To find out more about the show and access money saving coupons, visit www.southernshows.com/hsr . To learn about more opportunities to ask an Extension Master Gardener, contact your local Extension office.

— Shawn Banks

Smart Gardening — *How do I grow plants in clay soil?*

Callers who ask about red clay soil are often surprised to learn I prefer clayey soils over sandy soils. They are also surprised to learn that red clay is my favorite soil color and much preferable to the brown, white, yellow, or purple clays also found in the piedmont. You can learn to love clay if you manage it properly.

First, check the pH and adjust it to the desired range. Normally our soils are acidic and require lime to raise the pH. Second, check the nutritional status and add nutrients if necessary. You can check the pH and nutrients with a free soil test – contact your local Extension office to find out how.

Piedmont soils often lack phosphorus, a critical plant nutrient. Adding a phosphorus fertilizer based on soil test recommendations will improve phosphorus levels. In addition to having enough nutrients, soil must also be biologically active. Every nutrient that goes into a plant must first be processed by microorganisms. There are a surprising number of microorganisms in soil. Adding organic matter will feed them.

These first three steps apply to sand, silt, and loam, as well as clay soil. The critical difference for clay soil is managing pore space. According to research, the ideal soil has 45 percent mineral matter, 5 percent organic matter, and 50 percent pore space that contains a combination of air and water. You don't need to remember the numbers because you will never have ideal soil as long as you live in the piedmont of North Carolina. Instead, successful gardeners will ensure clay soil never gets packed down to less than 10 percent pore space.

The number one way soil loses pore space is by being compressed when wet. When clay soil is wet, don't shovel it, don't hoe it, don't step on it, and don't touch it. If the soil gets packed down, you will be less successful as a gardener. One clue that the soil is too wet to work is when it sticks to your shovel or hoe. Another sign is when your entire hand becomes discolored after squeezing the soil.

— David Goforth

Food Production — *Organic vegetable gardening*

In a world where food safety and product recalls are becoming more frequent, many of us are taking a serious look at how our food is produced, where it comes from, and its overall impact on our health and the environment. The result is an exploding interest in organic food production. This interest is driving a trend toward a more diverse food system in which consumers have closer ties to local farms or grow a portion of their food themselves.

Organic gardening involves much more than simply replacing synthetic pesticides and fertilizers with those derived from natural sources. A central tenet of organic gardening is nurturing the soil. Instead of synthetic fertilizers, gardeners use composted animal manures and green manures to improve and feed their soil. Green manures are cover crops that are tilled into the soil to add nutrients and organic matter. Crops commonly grown for this purpose include clover, vetch, soybeans, and buckwheat.

Another principle of organic gardening is to keep pest populations at low levels rather than trying to eliminate them. A variety of methods are used to control insect pests. Flowers are interplanted among vegetables to increase diversity and attract beneficial insects. When pest populations reach damaging levels and sprays are required, products derived from natural sources such as plant oils, chrysanthemum flowers, and bacteria are used.

Farmers who label their produce as organic must be certified through the U.S. Department of Agriculture, but gardeners need not pursue USDA Certified Organic status to enjoy the benefits of fresh, healthy food. Ever-increasing resources including organic farming books, classes, and on-farm demonstrations continue to make organic vegetable gardening more accessible to urban and rural gardeners. Call your local Cooperative Extension office for more information on how to get started growing food organically.

— Randy Fulk

Pest Alert — *Mole control*

Moles are an occasional nuisance animal, disrupting the aesthetic appeal of our yards and gardens. Moles do not hibernate like some other small mammals. To maintain their high metabolism and body heat, moles must consume 70 percent to 100 percent of their weight each day, producing numerous raised tunnels as they work to satisfy their voracious appetite for worms, grubs, and soil-dwelling insects. Hunting areas are in cool, moist soils and can be identified by ridged tunnels about 1.5 inches in diameter.


Charlotte Glen

Treating lawns for grubs will not eliminate moles and may even increase tunneling as moles work harder to find food sources. The most effective way to control moles is through trapping.

Several species of moles occur in very low numbers, so all mole species are protected in North Carolina. Moles cannot be killed without a depredation permit from the N.C. Wildlife Resources Commission. Permits can be obtained free of charge by calling the Division of Wildlife Management office at (919) 707-0050.

With a proper permit, spear-type traps offer the best control. Identify frequently used runways by caving in a short section of all tunnels, and check daily to see which ones the mole reopens. Repeat this process for two or three days, then place one or two traps along those major runways.

— Aimee Rankin

Carolina Lawns — *Spring lawn care*

Early spring is an excellent time to give home lawns a jump start with aeration and fertilizer. Cool-season grasses like fescue grow vigorously during spring and fall. Improving air, water, and nutrient movement through the soil during this time significantly increases the quality of the grass.

Aeration reduces soil compaction and allows water to infiltrate more quickly into the soil profile, creating a better root mass. Increasing root mass at this time of the year greatly improves the chance that cool-season lawns will survive the heat and drought of summer.

Applications of fertilizer after aeration will move nutrients immediately into the root zone of your lawn. This practice has shown excellent results in improving the density and color of cool-season turf grasses in preparation for summer stress.

The nitrogen in most lawn fertilizers comes in slow-release form, meaning small amounts of nitrogen are released over a period of time. These fertilizers work well for early spring applications and should be applied at a rate that provides ½ to ¾ pound of nitrogen per 1,000 square feet from mid-February to mid-March. All fertilizers have recommended application rates, usually based on square footage. You should know the square footage of your home lawn to make sure the proper amount of fertilizer is applied. Keep in mind that late applications of slow-release fertilizer will keep your cool-season lawn growing into early summer, which can increase disease problems.

The height of mowing influences competition against weeds such as crabgrass. Cool-season lawns should be mowed higher this time of year, at 3 to 3.5 inches. Spring watering should not be a frequent practice unless you are planning to water all summer as well. Instead, allow cool season turf to go dormant naturally during early summer.

— Karen Neill

Tips & Tasks

- Hand-pull winter weeds like chickweed and vetch from landscape beds before they set seed.
- Prune hybrid tea roses severely in early spring to force healthy new growth. Also begin a fungicide spray program to keep black spot disease down. If you want to minimize your pesticide use, replace disease-prone varieties with more disease-resistant types.
- Wait until after they have finished blooming to prune spring flowering shrubs such as forsythia and azalea.
- Plant cool-season vegetables like potatoes, peas, onion, lettuce, and other salad crops along with broccoli, cauliflower, and cabbage in March. They will be ready for harvest in May and June.
- Apply a pre-emergent herbicide to lawns for crabgrass control in early March. Spray winter weeds like chickweed and henbit with a broadleaf herbicide before they set seed.
- Do not fertilize cool-season lawns after March 15. This will reduce the lawn's ability to survive summer heat.
- Have lawn-mower blade sharpened if not previously done. Mow fescue lawns at three inches high, leaving the clippings on the lawn to return nutrients and moisture to the soil.

— Karen Neill

Extension Gardener

Around the State

Showstopper — *'Aztec Fire' anise*

'Aztec Fire' anise (*Illicium mexicanum*) is a large-leaved evergreen shrub with handsome dark-green foliage. In addition to attractive foliage, 'Aztec Fire' anise produces showy burgundy spring flowers, often blooming intermittently throughout the summer and fall as well.

'Aztec Fire' grows best in partial shade, but give this Mexican native plenty of room. Typically this anise will reach a height of eight feet and a width of six feet, with a naturally pyramidal growth habit.

An evergreen beauty, 'Aztec Fire' mixes well with other shade-loving shrubs and perennials. Plants also fit nicely in naturalized landscapes. Anise shrubs grown in full sun will develop lighter green foliage than those grown in partial shade. Consider this winner for your home landscape. Hardiness zones: 7 to 9.

— John Vining

Helping You Grow

Extension Master Gardener Conference

Everyone is invited to attend the 2013 North Carolina Extension Master Gardener Conference, taking place June 6-8 at the Union County Agricultural Services Center near Monroe.

Gardeners from across the state will come together to learn how to "Master the Garden Harvest" through workshops taught by nationally known speakers including Tony Avent from Plant Delights Nursery, Peter Hatch of Monticello, and chef and restaurateur Jim Noble.

For more information on this event, please visit mastergardenersunioncountync.org or email us at: ucmgwebsite@gmail.com

— Donna Teasley

Edibles — *Mesclun*

Mesclun is the perfect plant to kick start the spring vegetable garden. A mix of salad greens, mesclun packs a lot of variety in one planting. Mesclun mixes include greens such as leaf lettuces, spinach, mustard, kale, arugula, radicchio, and endive.

When purchasing mesclun seed, gardeners can choose between spicy mixes and those with milder tastes. Mesclun can be sown in early spring and again in late summer. Grow mesclun as you do loose-leaf lettuce, sowing seed in a well-prepared seedbed in the garden or in a container.

Mesclun grows and tastes best under moist, well-drained conditions, so water carefully to prevent water stress. Begin harvesting with scissors when young leaves reach 2 inches tall. Cut above the growing point so the crop will continue to grow and can be harvested multiple times. Sow successive plantings every 10 to 14 days to ensure a steady supply of tender greens.

— Lisa Rayburn

Sustainability — *Organic insecticides*

Recently, the number of natural insect-control products available from garden centers has increased. These products, derived from plants, microorganisms, and other naturally occurring materials, can control insect pests when applied properly. Simply substituting natural products for synthetic pesticides rarely produces good results.

One of the biggest differences between natural and synthetic pesticides is how long they last after application. Generally, natural pesticides break down very quickly once applied, sometimes in less than a day. Thus, they have to be applied more often and should be sprayed only when a pest problem has been properly identified.

Most natural pesticides are less potent than their synthetic counterparts and work best as part of an integrated plant health system. This includes improving the soil to provide good growing conditions for plants, choosing plants adapted to your site, applying water and nutrients when needed to prevent plant stress, and encouraging beneficial insects by planting a diversity of plants and flowers.

Natural insecticides that are available from most garden centers include insecticidal soaps and horticultural oils. Both control a wide range of pests but to be effective, oils and soaps must be applied directly to and thoroughly cover insect pests. Bt, a bacteria, is used to controls caterpillars, while spinosad will control caterpillars, fire ants, and Colorado potato beetle. Neem oil and pyrethrins will control many common pests, but like all insecticides, work best when applied while pest populations are low.

— Charlotte Glen

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