

SUMMER 2019

MOUNTAIN NEWS

Succession planting

Homegrown pepitas

Community gardening

Longhorned ticks

Cool-season lawns

Tips and tasks

STATE NEWS

Summer-flowering trees and shrubs

Dwarf crested iris

Tomatillos

Straw bale gardening

Gardening portal

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

Content Editor and Team Leader
Lucy Bradley, Ph.D.
NC State University
Campus Box 7609
Raleigh, NC 27695-7609

Managing Editor
Matt Jones

Regional Editor, Coastal
Matt Stevens

Regional Editor, Piedmont
Brad Thompson

Regional Editor, Mountains
Hannah Bundy

Statewide Editor
Hanna Smith

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Summer-flowering trees and shrubs

Any gardener can produce a colorful landscape of trees and shrubs in the spring. Even the fall isn't much of an effort because as leaves start to turn, the landscape can light up with brilliant yellow, red, and orange foliage. The winter landscape can also showcase seasonal berries, variegated foliage, colorful stems, and peeling barks without a gardener giving it too much thought. But it seems that the summer landscape proves to be the undoing of many gardeners. Other than relying on summer-flowering annuals and perennials, many gardeners don't know how to bring color into the landscape.

A few decades ago, the plant inventory for summer color was definitely lacking, and the most that gardeners could hope for was the occasional crape myrtle or rose of Sharon. There were plants out there, but they weren't necessarily readily available to the average home gardener. But times have changed! An explosion of summer-flowering trees and shrubs has been welcomed by those who are tired of a drab summer landscape.

Today the list of summer-flowering trees and shrubs is endless, and there is something for everyone. Let's look at hydrangeas. Forget about the giant blue-flowering shrub that towered over the landscape with massive blooms in early



Invincibelle™ Spirit II Mountain Hydrangea, a *Hydrangea arborescens* cultivar bred by Dr. Tom Raney at NC State, is a strong rebloomer, flowering midsummer to frost.
©Mountain Crop Improvement Lab, NC State



Magnolia grandiflora 'Little Gem'
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summer. Now there are dozens of new cultivars. Many are compact offerings such as Cityline® Rio and Jet Stream™. Many more are rebloomers that offer flowers on and off all summer, including Invincibelle™, Twist N Shout®, Tuff Stuff™, and Bloomstruck®.

The genus *Viburnum* includes shrubs that have been around forever. While they have beautiful flowers in the spring and early summer, their fall foliage is just as spectacular. There are also dwarf selections now available. The summer-blooming butterfly bush is a great butterfly attractor. But because of its size and re-seeding characteristics, it is not planted by some gardeners. New sterile and dwarf cultivars, such as the Lo & Behold® series bred by Dr. Denny Werner at NC State and the Pugster® series, make the butterfly bush a great summer show-off.

Blue-flowering *Caryopteris* cultivars such as Petit Bleu™ and 'Silver Mist' offer great summer color. Spirea, clethera, dwarf gardenia, abelia, and Knock Out® roses are all good choices for summer bloom. Even the new dwarf magnolia 'Little Gem', which is small enough for a container but blooms again and again throughout the summer, can offer summer interest.

It takes a little research to ferret out these summer-flowering offerings, but just knowing that there are choices for a great summer landscape is enough to get those creative juices flowing.

—Donna Teasley

Extension Showcase

Community gardening increases awareness and access to fresh foods

County agents with NC State Extension work to increase agricultural awareness and fresh food opportunities among members of their communities. However, surveys of young people across the country have shown that children lack basic knowledge about how their food is produced. In addition, many areas of our state have been labeled as “food deserts” by the USDA, meaning access to fresh foods is low.

Community gardens are one strategy for addressing both of these concerns. Young people engaged in community gardens learn about fresh food production while improving their nutrition and fitness. Community gardeners grow food to help feed their communities, increasing access to fresh local foods. In 2008, Henderson County Master Gardener Volunteer Janet Gardener saw a need for a place where local community members could grow their own vegetables. Established in 2009, the Bountiful Harvest Community Garden will have its ninth anniversary in 2019.

Since its inception, the Bountiful Harvest Community Garden has grown to include 35 plots. There is a waiting list of individuals who are interested in renting plots. Over 300 people have participated in the program.

—Steve Pettis

Smart Gardening: Succession planting extends the season



Staggered plantings ensure a steady harvest.
©Mats Hansson, CCO

What usually happens around mid-August in many vegetable gardens? Most of our gardens have seen better days, and many of the crops aren't producing very well by late summer. How can we continue to harvest fresh, good-looking produce during the dog days of summer? It isn't as hard as you might think. Instead of planting all of the tomato crop at one time, why not stagger the planting so that you will have fresh, young, bearing plants in late summer, just as you did in early summer? It works quite well to plant a few new plants every couple of weeks to keep that fresh produce coming on strong for the entire summer. Squash and cucumbers can be direct-seeded in the garden at intervals throughout the summer, ensuring vigorous harvests well into late fall. A late planting of green beans and some late corn can be a treasure trove of good eating when most other gardens have given up. The best formula for deciding what to plant and when to plant late crops is to look at the days-to-harvest information on the back of the seed package and then count back from our first frost date. Sure, some of your later plantings might have to be limited to cultivars with a shorter growing time. But with a little planning, you can successfully have great harvests all the way up to the first frost. Not everything has to be planted at the same time. It is human nature to want to get out and plant when the weather breaks, but a little planning ahead could mean more garden crops that will be plentiful in the late growing season. All it takes is leaving some space to put in those staggered plantings, and you'll be harvesting until frost. For more information on planting dates in the mountains and foothills, see NC State Extension's **Western NC Planting Calendar**.

—Donna Teasley

Food Production: Homegrown pepitas do not disappoint



Oilseed pumpkins produce tasty pepitas.
©Elina Snyder

Perhaps so-named for its naked or hullless seeds, the 'Lady Godiva' pumpkin provides a good source of delicious and easily digested hullless pumpkin seeds, also called “pepitas.” ‘Good Egg Godiva’, ‘Kakai’, and ‘Pepitas’ are newer varieties that also have hullless seeds. These pumpkins are also known as oilseed pumpkins because their seeds have a very thin papery shell instead of the thick hardened shell of the seeds that pumpkin carvers enjoy roasting and chewing while carving spooky scenes. Although tasty, the thick-hulled seeds are more difficult to chew and digest than the hullless seeds produced by oilseed varieties. To grow oilseed pumpkins, place five seeds in hills 3 to 6 feet apart. Thin to two to three plants per hill. The plants will grow best in a well-drained soil with good organic matter content. The site should also have good airflow. Harvest at the appropriate time according to the varietal days to maturity. Godiva pumpkins do not have the best tasting flesh, but they do have decorative value. Rather than displaying a solid orange skin, they have bright orange skin with green striping, so they lend diversity to a fall pumpkin display. Soon after harvest, carve or cut pumpkins in half and scoop out the seeds. Rinse the seeds with water, allow to dry, and refrigerate for up to 14 days. After 14 days, transfer to the freezer for long-term storage. Godiva pumpkin plants will produce one to three pumpkins per plant, with each pumpkin yielding approximately a fourth pound of seeds. These unique pumpkins are ideal for frugal homesteaders, dedicated pumpkin seed eaters, and home gardeners with ample garden space. You will love the flavor and quality of these home-grown pepitas.

—Elina Snyder



extensiongardener.ncsu.edu

Pest Alert: Longhorned ticks

The longhorned tick, *Haemaphysalis longicornis*, was reported in North Carolina for the first time last summer. The tick was found on an opossum in Polk County. Longhorned ticks are native to Asia but have been in the United States since at least 2010. Scientists expect this tick to spread rapidly because a female is able to reproduce parthenogenetically, without a male. This tick poses a concern for livestock and pets because of the tick's tendency to form large infestations causing a decline in health and vigor due to blood loss of the affected animal. Pet and livestock owners should consult their veterinarian about tick prevention treatment for their animals. Although such a case has not yet been observed in the United States, this tick may become a carrier of several dangerous tickborne diseases.



The longhorned tick (*Haemaphysalis longicornis*).
©James Gathany, CCO

Practice general tick prevention to avoid an encounter: Reduce tick habitat through landscaping; ticks need high humidity to survive. Keep lawns mowed and debris piles away from human and pet areas in the yard. A mulch barrier can be used between wooded areas and high use areas like a playground or patio. To avoid tick bites, wear long pants tucked into socks and use a 20 percent DEET insect repellent. Clothes and shoes can be treated with permethrin. Always check yourself for ticks after working outside. Shower yourself and wash work clothes so that ticks can be rinsed off before they attach. If you are bitten by a tick, use tweezers to remove it by grasping the tick and pulling away from your skin. Do not twist as this can cause the mouth parts to break off in the skin. Clean the bite area. Put the tick in a plastic bag and save it. Should you develop a rash or flu-like symptoms after a bite, contact your doctor and bring the bagged tick to the appointment for analysis.

—Sara Freeman

Lawns: Cool-season lawns in summer

As we transition out of spring and into summer, our cool-season lawns here in western North Carolina are beginning to struggle. Cool-season lawns don't like hot, oppressive, humid weather, and it starts to show when the days and nights start to heat up. Unless you have an irrigation system, the lawn can suffer when rain becomes scarce. That hasn't happened yet, but down the road it will likely become an issue. What can you do to keep the cool-season lawn growing well during the hot days of summer?

Proper mowing is a big help to the heat-stressed lawn. Mow when the lawn needs mowing, and keep turfgrass at 3 to 3½ inches and no shorter. This helps to shade the crown of the turfgrass and keeps the plants growing. Never cut off more than a third of the height of the lawn at one time. Regular mowing will help prevent this and cancels out the need for bagging the clippings. When grass is cut regularly, clippings can be left on the lawn where they will decompose in a couple of days.



Proper mowing helps grass to stay healthy in summer.
©Counseling, CCO

Never fertilize cool-season lawns in the summer. High levels of nitrogen can damage and kill cool-season grasses during hot weather. Nitrogen in combination with hot temperatures can also encourage brown patch, a common fungal disease of cool-season grasses. Try to avoid watering the lawn in the summer. The lawn can withstand some dry weather, and the use of sprinklers can encourage the lawn to become dependent on frequent watering. It is okay for the lawn to look a little off-color during the heat of summer.

—Donna Teasley

Tips & Tasks**Summer tasks to keep your garden looking radiant****General**

- Walk your entire garden and landscape at least every other day, if not daily, to check for problems such as busted hoses, weedy areas, and insect infestations.
- Scout for insects. Don't miss the undersides of leaves, and look for any irregular patterns or feeding indicators. Use integrated pest management strategies appropriately.
- Summer is hot, so make sure that you are providing appropriate water for your landscape.
- Now is *not* the time to plant new trees and shrubs.
- Mulch around the root zone of plants for water retention. Make sure not to let mulch touch a plant's stem or trunk. Use mulch to lessen the impact of weeds.
- Conifers can be pruned in early summer for shaping. Make sure to prune only new growth and not any brown wood as it will not regenerate new growth.

Edibles

- Succession planting where crops are planted every two weeks can help extend your harvest.
- Start planning your fall garden to be ready for late summer crops.
- Prune bramble canes after fruit-bearing is completed. Remove any canes that bore fruit this year.

Perennial Flowers

- Deadhead flowers once they have finished blooming.
- Shrubs such as gardenia and big leaf hydrangeas can be pruned immediately after bloom.

—Hannah Bundy

Helping You Grow

Gardening portal

The NC State Extension Gardening Portal (gardening.ces.ncsu.edu/) is a great resource for any home gardener looking for information on topics ranging from soils, landscape design, propagation and pruning, to plant selection and integrated pest management. The portal houses links to various publications and resources that any gardener can find valuable.

Tabs on the right-hand side of the page drop down to reveal links to subpages that either go directly to another website or to another webpage where there are several links to resources about the topic.

While it's a great website where information on several topics can be found, it can get a little overwhelming to sort through because of the sheer amount of good information housed on the site. Lucy Bradley, Extension Urban Horticulture Specialist, has created a short video with some quick tips for navigating the gardening portal (gardening.ces.ncsu.edu/2019/03/quick-tips-for-navigating-the-gardening-portal/).

NC State Extension is always looking for the best ways to get research-based information to the citizens of North Carolina, and this portal is just one of the many ways we are trying to make information accessible so that you can be successful in your gardening endeavors.

—Hanna Smith

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Plant Watch: Dwarf crested iris

A surprising native plant has proven to be a raging success in my garden—*Iris cristata*, otherwise known as dwarf crested iris. This lovely herbaceous perennial is a fast-growing groundcover that can handle full sun to part shade. Cheerful violet to blue flowers appear in midspring in the mountains. The plant rarely grows above 6 inches tall, but can spread quickly to provide a thick mass of attractive light-green leaves that persist for three seasons. At home in my small woodland garden bed, *Iris cristata* truly shines as it does in the large colonies found in natural areas in our nearby forests and protected areas. A favorite spring spot is the Baxter Creek area in the Great Smokies National Park, where the trail is flanked on both sides by foot-wide patches of blooming dwarf crested iris. Consider adding this easy-to-grow native to your backyard! —Meghan Baker



Dwarf crested iris (*Iris cristata*).
©Meghan Baker

Incredible Edibles: Tomatillos



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The tomatillo or husk tomato (*Physalis ixocarpa*) looks very similar to a tomato plant except each fruit is enclosed in a papery wrapping that is removed before eating. Tomatillos are used primarily in fresh Mexican and Guatemalan dishes such as green sauces and salsas. Because tomatillos are a warm-season crop, the best growing conditions are day temperatures of 80 to 90°F and night temperatures of around 60 to 70°F. The plants prefer well-drained soil, and their bushy habit requires as much as 3 feet between plants. They do not like to be supported by a trellis or a cage. For best flavor, harvest when the fruit fills the husk but is still green and firm. Stored in a cool, well-ventilated place in a single layer, they can last for months if the husk is left attached.

—Hanna Smith

Sustainability: Straw bale gardening

If you like to grow vegetables or flowers and have limited space or poor soils, you may want to try straw bale gardening. Begin by selecting bales derived from wheat, oat, or rye straw. Do not use hay or pine straw. Select bales that are free of weeds and fire ants—you don't want to introduce any new pests to your landscape. Select a site that receives full sun and is close to a water source. Leave the strings on and place the bales on their sides with the cut side of the straw facing upwards. Condition the bale by using the following method: **Days 1, 2, and 3:** Water bales thoroughly. **Day 4:** Add 1 cup of dolomitic lime and ½ cup of 46-0-0 or 34-0-0 and water in. **Days 5 and 6:** Add a half cup of 46-0-0 or 34-0-0 and water in. **Days 7, 8, and 9:** Add a fourth cup of 46-0-0 or 34-0-0 and water in. **Day 10:** Add 1 cup of 10-10-10 or 8-8-8 and water in. **Day 11:** Plant bales. To plant the bales, use a pruning saw or serrated knife to create a 6-inch by 6-inch hole in the bale. Place a transplant in the hole and fill the hole with potting soil or compost. One bale will grow two determinate tomatoes, four pepper plants, two squash, two melons, two cucumbers, six to eight lettuce plants, six to eight broccoli plants, or six to eight strawberry plants. Straw bales will need water more frequently than soil. Check the moisture daily and water plants as needed. Fertilize every two weeks with a complete fertilizer by adding 1 tablespoon of complete fertilizer around each plant. At the end of the season, recycle your straw bales by removing the strings and composting.

—Brad Hardison



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