

WINTER 2017

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Get Real: Choose and Cut a Christmas Tree

We spend much of our lives surrounded by things made of plastic and imported from other countries. Often family time is spent as everyone gathers around his or her own electronic device. Invite nature to Christmas this year and enjoy time together creating memories that will last a lifetime. Make the centerpiece of your holiday traditions a freshly cut Christmas tree grown right here in North Carolina on a family-owned farm. Unlike its artificial counterpart, a freshly cut tree engages the senses with fragrance and soft green limbs. And traveling to a Christmas tree farm is all about the time your family spends together.

There are more than 300 family-owned choose-and-cut farms in North Carolina, in both the eastern and western parts of the state. These farms offer a variety of experiences for the family to enjoy. For younger children or grandchildren, you can choose a farm that has activities such as photos with Santa Claus, hayrides, and opportunities to interact with farm animals. If you're after a taste of winter to get you into the spirit, visit a mountain farm where snow often falls, offering opportunities for snowball fights and sledding down the mountain. Dress warmly, but don't worry about the cold. Most farms have a warm fire with complimentary hot chocolate and cider.

Farms offer other Christmas-related items, such as wreaths, garland, bows, and handmade crafts. Making wreaths and garland are family traditions for the owners of the farms and their families. Often several generations will gather together in barns and garages to cut the greenery and



North Carolina's choose-and-cut Christmas tree farms offer families a variety of festive experiences.
©Cornett-Deal Tree Farm

assemble the wreaths and garland in the weeks leading up to and during the Christmas season.

Some people are concerned about cutting down a tree that took years to grow. Not to worry. For every tree cut, another is planted in its place. Replanting provides a sustainable crop that can be produced on land that is unsuited to other crops. At the end of the season, most cities have programs to recycle cut trees into mulch and other landscaping products—unlike the artificial counterparts that eventually end up in a landfill. To find a farm, visit these websites:

NC Christmas Tree Association:

www.ncchristmastrees.com

Eastern NC Christmas Tree Growers

Association: **www.nc-chooseandcut.com**

Watauga Christmas Tree Association, Boone:

www.wataugachristmastrees.org

Jackson County Christmas Tree Association:

jacksoncountytrees.com/retail/

Ashe County Christmas Tree Association:

www.ashecounychristmastrees.com

Alleghany Christmas Tree Association:

www.alleghanycta.com

Avery County Christmas Tree Association:

www.averycountychristmastrees.org

Yancey County Grown:

www.yanceygrown.com

Mitchell Grown: **www.mitchellgrown.com**



Freshly cut trees offer seasonal scents and soft branches. ©Paige Patterson.

—Paige Patterson

Extension Showcase

Wilson Winter Lights

Dazzling lights, floral delights, and holiday sights are all part of the Wilson Winter Lights holiday event at the Wilson Botanical Gardens.

Join the Wilson County Extension Master Gardener Volunteers and get into the holiday spirit. Wilson Winter Lights runs November 30th through December 4th in Wilson, NC.

Enter through the magical wonder of Butterflies' Flight of Fantasy, explore Candy Cane Lane, be entertained with Dazzling Lights synchronized with holiday music, see Santa's reindeer resting by the stream, visit Angel's Cove, and pop in on Black Tie Penguins marching toward the windmill pond.

Wilson Winter Lights runs nightly from 6:00 to 9:00 PM. The last tickets will be sold at 8:45 PM each night. Advance tickets can be purchased at the Wilson Agricultural Center from 8:00 AM to 5:00 PM weekdays. Tickets cost \$5 for adults (age 13 and over) and \$3 for children (age 12 and under); cash or check only.

For more information, contact Cyndi Lauderdale or Sue Nichols at (252) 237-0113 or by email at info@wilsonbotanicalgardens.org. See event updates on the Wilson Botanical Gardens Facebook page or on our website:

www.wilsonbotanicalgardens.org.

All proceeds support the STEM Garden and programs at the Wilson Botanical Gardens.

—Cyndi Lauderdale

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Smart Gardening: No garden space? No problem!



©S. G. Simpson

What do you do if you have little or no in-ground gardening space? Create space with containers and planters. The key components of most **container gardens** are good drainage, a water source for irrigation, proper sunlight, adequate container size, and a good growing media. Commercial or homemade growing media (potting soil mixtures) that contain a combination of soilless products such as compost, peat, perlite, vermiculite, or sand are good choices. Avoid using soil from your garden and other sources of "topsoil" because these may contain diseases and often lack the structure needed to drain well. The addition of water-soluble fertilizer every few weeks will keep plants growing all season.

Plant choice is limitless. Remember large plants need large containers. Annuals will typically need less space, while perennials will need more space as they grow. Herbs, fruits, vegetables, and flowers are all good choices. Consider the needs of your plants when choosing and locating containers. Cold-hardy plants like strawberries can survive the winter, but all-day sun is essential for a good harvest. When freezing temperatures occur, additional insulation and frost protection may be needed to ensure fruit is not lost. Cooler months will require less watering, but warming temperatures may require more frequent irrigation. Large containers will hold more moisture, while small containers dry out quickly. Shower wands are recommended for gentle irrigation. Don't forget to experiment and try different designs and arrangements: vertical planters, tiered pots, or cylindrical containers. Anything that holds growing media, will not rot, and can provide drainage is a viable option. Have fun and create that space!

—Daniel Simpson

Food Production: Extend the harvest

By winter, many of us are ready to be done with the vegetable garden. And in reality, most of us already are. For those few die-hard garden enthusiasts who would really like to garden the whole year, a row cover may just fit the bill. What year-round gardening takes is some type of framework over the garden bed covered with either a row cover or a sheet of plastic. The row cover will help keep a few degrees of warmth near the plants, whereas a sheet of plastic will offer 5° to 10°F of protection for tender crops. I tried plastic covers a couple of years back and harvested lettuce until the temperatures dropped into the low 20s and my lettuce frosted. Radishes, spinach, and cabbage also grew well under plastic row covers until spring.



©Shawn Banks

This is what I learned from my experience: On days when the daytime highs would reach 65°F or higher, I opened the ends and let the air flow through the row cover, then closed it up when I returned home from work so it wouldn't get too cold inside the covered garden at night. If the nighttime temperatures weren't expected to dip below 35°F, I left the ends open to keep the plants adapted to the cold night air. Watering with a soaker hose to keep water off the plants' leaves worked well to keep plants disease-free. Besides extending the growing season from fall into winter, I also used the covered beds in the spring to warm the soil and give my garden about a three- or four-week head start on the growing season. Contact your county Extension center for more information on **season extenders**.

—Shawn Banks

Pest Alert: Tea scale

The tea scale, *Fiorinia theae* (Diaspididae), is a major pest of camellias and Asian hollies and a type of armored scale. Scale insects have hard, protective, waxy coverings that are detachable from the insect's body. Armored scales have piercing-sucking mouth parts that extract the sucrose-rich fluids from plant tissue. Unlike soft scales, armored scales are immobile after the first molt and do not excrete honeydew. **Tea scales** preferentially feed on the undersides of leaves, causing conspicuous yellow splotching on upper leaf surfaces. Heavy infestations can lead to premature leaf drop, fewer blooms, and overall plant decline.



Tea scale (*Fiorinia theae*). ©Lorraine Gainey, Bugwood.org, ID 5430356, CC BY-NC 3.0

Female tea scale armor is yellow-brown, about 1/6-inch long, and the shape of an inverted boat, while male tea scales produce copious cottonlike waxy strands that are evident in heavy infestations. Mobile "crawler" nymphs hatch from tiny, lemonlike eggs under the armor of their mothers. Once they find a suitable feeding site, the crawlers molt and remain at that site for the remainder of their lives. Crawlers hatch from February to November, producing many overlapping generations per year. Dead scales leave behind their armor, so look for tiny yellow insects underneath the armor to determine if the infestation is recent. Minor infestations can be resolved by removing and destroying affected leaves. Because their armor protects scales from contact insecticides, targeting the crawler stage provides the best control. Horticultural oils and insecticidal soaps are the best options for heavy infestations.

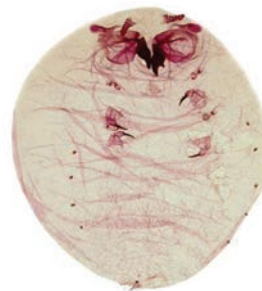
— Matt Jones

Lawns: Ground pearl wisdom

If you have tried to grow turfgrass in sandy soils, you probably are familiar with a very small, yet menacing pest known as ground pearl (*Margarodes* spp). From its biology to its treatment, **ground pearl** is extremely challenging to manage as there are no chemicals currently available for control. To make matters worse, all warm-season grass varieties are susceptible to this tiny yet destructive pest. With an intentional approach to managing the health of your turfgrass, however, you can successfully mitigate extensive damage to your lawn for several years before replacement of the lawn might be necessary.

Ground pearls are insects that belong to the scale family. Though the adult females are bright pink and extremely small, the common name derives from the hard, globular, yellowish-white cyst that encloses the immature form of this insect. Damage usually occurs in lawns with sandy soil and appears in roughly circular shapes. Turf may die back slowly, up to a few inches each year, or more quickly, by up to a foot, if infestations are severe. Sample potentially infested soils by digging 3 to 4 inches deep in dead areas of the lawn. Carefully sift the soil to find the pearl-like insects.

Control of ground pearl starts with proper soil fertility management, which means conducting annual soil tests of your lawn. By watering, liming, and fertilizing as prescribed by soil test results, you maintain the healthiest lawn possible. A healthy lawn may be less susceptible to ground pearl damage. Proper mowing height with an appropriately sharpened blade will further help a lawn recover from ground pearl infestation. Though all warm-season grasses are affected, university studies have indicated that bermudagrass and bahiagrass are less susceptible to ground pearl damage and are recommended for yards with heavy infestations.



Ground pearl, *Margarodes* spp. ©Alessandra Rung, USDA APHIS ITP, Bugwood.org, ID 5508934, CC BY-NC 3.0

— Sam Marshall

Tips & Tasks

Ornamentals

- Resist the urge to cut back certain perennials, such as salvia and lantana, because doing so will allow moisture to get into the crown. Combined with cold temperatures, crown moisture will often cause the plant's demise.
- Tidy up in spring by cutting back the branches and stems in time for new growth.

Feed the birds

- Nonmigrating birds, such as cardinals, will appreciate food and fresh water this winter.
- Fatty suet and high nutrient seeds, including black oil sunflower seeds, provide maximum nutrients as birds burn lots of calories trying to stay warm.
- Be consistent in providing food, as birds become accustomed to feeders. Supply fresh water, particularly when temperatures are below freezing and water availability in the environment may be limited.

Vegetables

- If you planted a fall garden of greens, keep the crop going throughout the winter by providing a little protection from freezing temperatures and damaging precipitation. Floating row covers made from Reemay® can provide a few degrees of protection when we experience below-freezing temperatures.

—Paige Burns

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Helping You Grow



Do you want to explore the state? Help your community? Grow as a professional? Meet amazing people? Get outdoors and close

to nature? Achieve all of these things and more by completing the **NC Environmental Education Certification Program**.

The program's goals are to increase environmental literacy, provide practice in environmental education teaching methods, and foster community leadership. The program enhances the ability of educators and organizations to provide quality programs and resources that benefit local communities while investing in the future of our environment. The self-paced, experiential program includes six different components: workshops, outdoor environmental education experiences, knowledge of resources and facilities, teaching components, community partnerships, and continuing education.

Those who are certified will receive a certificate of program completion signed by the Governor, Chairman of the N.C. State Board of Education, and Secretary of the Department of Environment and Natural Resources. A statewide ceremony occurs for professional recognition, and networking opportunities are arranged with other environmental educators across the state. For more information visit www.eenorthcarolina.org.

—Katy Shook

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Plant Watch: Harry Lauder's walking stick



Corylus avellana 'Contorta'. @Shawn Banks

serious disease or insect pest problems. Most plants sold in commerce are grafted. It even does well in large containers.

Corylus avellana 'Contorta', commonly referred to as the contorted filbert or Harry Lauder's walking stick, is a wonderful plant with its array of twisted, gnarled, and contorted branches. It was first discovered growing as a sport in an English hedgerow in the mid 1800s. It was given the common name of Harry Lauder's walking stick in the early 1900s in honor of Scottish entertainer Harry Lauder (1870 – 1950). This deciduous, rounded, multi-trunked shrub typically grows to 8-to-10-feet tall. It is noted for its beautiful, contorted branches, which are best observed in winter when the foliage is absent. Late winter flowers known as catkins brighten the winter scene, but don't expect any nuts. This filbert will thrive in USDA zones 4 through 8 and has no

serious disease or insect pest problems. Most plants sold in commerce are grafted. It even does well in large containers.

—Karen Neil

Incredible Edibles: Winter windowsill gardening

Gardening right through winter will help chase those blues away. Microgreens offer the opportunity for a fresh winter harvest. A southern facing window providing six or more hours of direct sunlight works best. Artificial lighting may be provided to supplement natural light if needed. Leggy, pale greens are a sign of not enough sunlight. Options to grow include many cool-season greens, such as beets, arugula, lettuce, chard, turnips, mustards, spinach, kale, radish, peas, and even sunflowers, and some herbs like dill or fennel. Seeds are sown very close together in a shallow potting soil mix because the plants will be harvested when tiny. Harvest can be as soon as two weeks from seeding. Keep the soil moist but not wet. A small fan for air circulation reduces disease pressure. These nutrition packed greens are harvested after the first true leaves develop. Enjoy your fresh garnish on a sandwich or salad.

—Mack Johnson

Sustainability: Winter pruning

When people are asked why they prune in the winter rather than in the summer when it's warm outside, they often answer with, "This is when I was told to prune." A good answer to be sure. A better answer might be that winter pruning makes it easier to see what needs to be removed, and there is less chance of a fungal spore landing on the cut and infecting the tree. The real question should be this: **Why prune?** When we think about it, pruning is often about aesthetics. Pruning, however, can also be about keeping the plant healthy. When pruning, look for dead, damaged, or diseased wood.

These are the first parts to be removed. Also look for water sprouts—limbs that grow straight up in the middle of the plant—and remove those as well. Crossing limbs and those growing back into the middle of the plant get removed because they are potential problems for the tree or shrub, blocking air flow and preventing sunlight from penetrating deep into the plant. Limbs that are rubbing create open wounds where diseases can enter and infect the plant, so these limbs also are removed. If about a third of the plant hasn't been removed by that point, then remove limbs that are growing down toward the ground. Those do little good for the plant. Pruning is as much about creating a healthy plant as about aesthetics, although it's important to keep each plant's beauty in mind as well.



Winter pruning makes it easy to see what needs to be removed and reduces the chance of a fungal invasion. @Shawn Banks

—Shawn Banks