NC STATE EXTENSION
Master Gardener | Johnston County

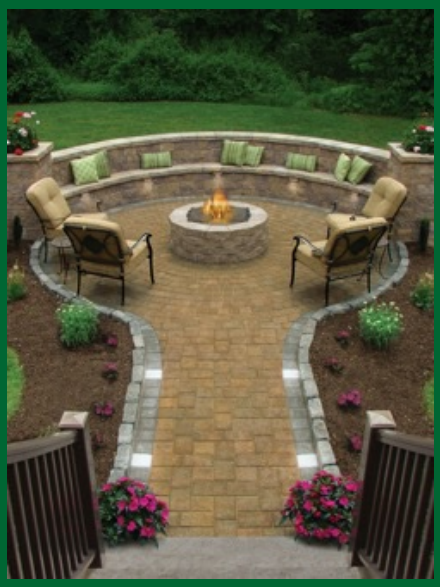
The Gardener's Dirt Newsletter

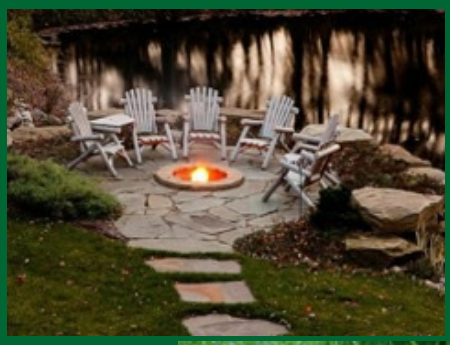
September 2019

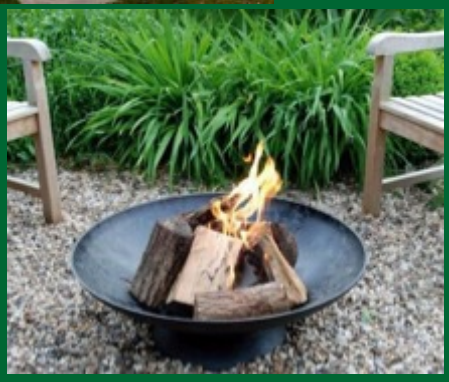
Feature Article:

Fire Pit Design

By: Barb Barakat, Johnston County Extension Master Gardener Volunteer







Designs to Warm You

-- wood or liquid fuel -- elaborate or rustic --
-- raised or in-ground --
-- stationary or movable seating --

Is there anything cozier than sitting around the fire on a cool evening? I'm already dreaming about gathering under the stars around a bonfire with friends and family - chatting, toasting marshmallows, dancing or just cozying up in front of a warm, crackling fire. So let's get busy . . . now is a good time to design a fire feature into your landscape.

Consider these design & fire safety elements

- You'll need lots of open skies above -- don't build near low-hanging branches or under a covering
- Whether you build with rocks from the yard or pavers, a stainless steel interior liner is a recommended feature (high heat can cause some rock to split & crack
- A good height is 6 - 12 inches - tall enough for a good safety buffer to keep logs from rolling out yet low enough to "lean in" to roast marshmallows.
- Build your pit where you can see it - for aesthetics & to keep an eye on the fire
- Consider moveable furniture, so you can adjust your place as the wind (smoke) shifts.
  - Check municipal codes - generally, the recommendation for fire pits are 10' away from any combustible material (your house, outbuildings)
- Tips: Check the weather forecast, I don't light a wood fire on a windy day & I always bring the hose down for when hot embers stray.
- Want something smaller? Consider a gas-powered fire bowl or table.

Gas fired or Wood - it's really a personal choice

Gas Advantages	Wood Advantages
• Instant - easy on and off • No embers, no blowing smoke	• Natural experience - distinctive smell & the sound of logs crackling • Produces more heat

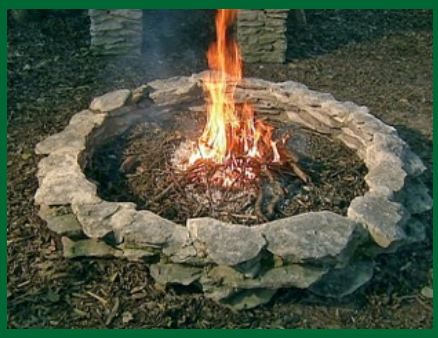
- Decorative features - fire glass & lava rock
- No wood to cut, split, and age
- Burns Clean

- Interactive - fire starting, stoking
- Ash needs to be shoveled out occasionally

Cited: https://www.earthturfwood.com

https://www.bbqguys.com/fire-pits/resources/buying-guides/wood-vs-gas-fire-pits

Some ideas: https://morningchores.com/fire-pits/



Feature Plant:

Red Hot Poker
Kniphofia

by: Barb Barakat, Johnston County Extension Master Gardener Volunteer

Perennial Bed Companion Planting: Kniphofia (orange), Rudbeckia (yellow), Artemisia (white), Joe Pye Weed (purple)

Tall and vigorous, Red Hot Poker *Kniphofia* is a late flowering perennial with tall spikes of magnificent orange-red tubular flowers.The stout, two-toned flower spike stands well above its companions in a perennial garden setting.

Growing to a height of 5-6' with a spread of 3' and blooming in late summer, the Red Hot Poker *Kniphofia* performs best in full sun and moist well-drained soil. *Kniphofia* provides a striking vertical statement in the garden, is drought and deer resistant, and attracts butterflies, hummingbirds, and fellow gardeners.

Deadheading spent flower spikes encourages more blooms. Fall and spring are ideal times to plant. *Kniphofia* propagates by division or seeds.

https://www.gardenia.net/plant/kniphofia-nobilis

Quick Tip:

Hot Pepper Jelly

By: Sandy Cordray, Johnston County Extension Master Gardener Volunteer

Hot Pepper Jelly Recipe

1 1/2 cup of Green Bell Peppers
7 1/2 cups of Sugar
1/2 Cup of Hot Pepper
1 1/2 Cup of Vinegar (5%)
2 packages of Liquid Pectin

1. Process green and hot peppers in food processor . *(remove seeds from hot pepper for less heat)*
2. Boil first 4 ingredients 10 minutes
3. Add pectin, boil 5 additional minutes
4. Pour jelly into hot sterile jars, apply lids
5. Put in hot water bath 10 minutes to seal jars
6. For more color, add food coloring

Serve over a block of cream cheese with crackers. Yum

Ask an Expert:

Controlling Fire Ants

by Michael Waldvogel, NCSU Entomology & Plant Pathology

Michael Waldvogel, NC State

A mound of this size (2' diameter/18" high) contains about 100,000 workers, several hundred winged adults and one queen

Michael Waldvogel, NC State

The red imported fire ant, *Solenopsis invicta*, continues to spread across North Carolina. This is due in part to favorable climate conditions & our increased residential and commercial development which often spreads ants (accidentally) in infested sod, nursery stock, soil, wheat straw, and other materials. Although fire ant stings are not fatal for most people, they are painful. Eradicating fire ants is difficult and not practical in many cases. However, you can manage infestations and cut the risk of getting stung. Fall is the best time to watch out for existing & newly developing mounds and to implement controls. Pesticides and baits work best when the temperature is between 70-85°F

Two aspects of red imported fire ant infestations are particularly annoying: the unsightly mounds and the painful stings received when mounds are disturbed. Mounds are typically constructed in open sunny areas and dome-shaped. If the mound is disturbed, ants swarm out and sting the intruder. Within 24 hours a pustule-like sore forms and itches intensively. Scratching can lead to a secondary infection and scarring. A small number of people are highly allergic to fire ant stings and require immediate medical attention.

Red Fire Ant Reproduction

If you break open an active fire ant mound, you typically find the "brood" - whitish rice grain-like larvae and pupae. These immature ants will eventually develop into workers or winged adults. During the spring and summer, winged males and females leave the mound and mate in the air. After mating, females will form their own nests - most don't survive; but when the queen does survive, she sheds her wings, burrows into the ground, and lays eggs to begin a new colony. In the late fall, many small colonies of fire ants will appear - that is why fall is the best time to treat.

Controlling Fire Ants with Integrated Pest Management

Red Fire ants forage for food by traveling in underground tunnels that radiate from the mound and then onto the surface (more mounds). You can reduce ant foraging around buildings by eliminating food sources:

- trash cans secure, spillage hosed down, no debris left on ground.
- check for ants in purchased sod, plants & mulch

Chemical Control

The most environmentally sound chemical approach is to treat individual mounds, NOT to broadcast over a large area. Mound treatment targets the fire ants & greatly reduces the impact on all other ground-dwelling insects.

Mound Treatments

Individual mounds may be treated with a liquid or dust insecticide formulation or with insecticidal bait. It is very important to read pesticide labels before you buy & before you apply. Many are NOT labeled for use in fruit & vegetable gardens or around livestock and poultry. Keep children and pets away from the treated area until it is dry. Always follow label directions when mixing & applying insecticides.

Drenches are liquid insecticide treatments that must penetrate throughout the mound and contact most of the fire ants in the colony. They are mixed and poured right over the mound at the rate of 1 gallon for a 6" mound (2 gallons for a 12" mound, etc). It is the volume of insecticide drench that is most important. The ground must be wet to a distance of about 2' around the mound. Sometimes the drench does not kill all the ants and small mounds will emerge 10 to 15 feet out of the original mound. Several days after the application, search the area around the treated colony for new mounds and drench them as well.

Granular baits can be used to treat individual mounds. These baits are a mixture of insecticide and food that is attractive to fire ants. Worker ants carry particles of the bait back to the mound and feed them to the "brood" (larvae or immature ants) and the queen. Although slower acting, bait treatments do not need water. Apply the bait according to label directions. Sprinkle the recommended amount around each mound (not on top of the mound itself). It is best to apply the bait in the early evening. Moisture renders bait ineffective so apply when the ground is dry.

Two-Step Method

A highly effective (but requiring more effort) is the "two-step method." Place the bait out around a mound. Wait about 5-7 days. Then, apply a mound drench which should kill the remaining workers more quickly.

Broadcast Applications

Broadcast treatments allow large areas to be treated quickly - but they are indiscriminate - they kill all the ground insects along with the fire ants. This makes broadcasting a poor environmental choice. Areas of high public use may be protected by spring and fall broadcast applications of ant bait or a well-timed granular insecticide. They are water activated so rain or irrigation must be applied shortly after the application.

Fire Ants Indoors

The key to reducing the threat of fire ant infestations indoors is prevention, which means removing exposed food sources that may attract these insects. In some cases, fire ants may nest indoors, e.g., inside walls or partially under concrete slab floors. In those instances, you will likely see soil and other debris pushed out around expansion joints near the edge of carpeting or around water or other utility pipes. In most situations, fire ants are simply entering the building from an outdoor nest. Treat immediately using an insecticide (not bait) labeled for indoor use. The best way to prevent indoor problems with fire ants is to control them outdoors when you find mounds.

Non-Chemical Control of Fire Ants

Reduce the amount of baits & pesticides used by implementing this strategy 1st.

Hot Water and Mechanical Disruption

Research shows that mound disruption & hot water (90°F+) poured directly into the mound kills large numbers of ants. As always, watch for satellite mounds that seem 5-7 days later and retreat. One potential downside to using hot water is that it can damage/kill vegetation in the general vicinity and can be hazardous to the person carrying hot/boiling water over uneven terrain. (Wearing boots & using a long-handled shovel, I dig a concave hole in the center of the mound then pour the boiling water in)

Grits - no

A long-standing folklore method of controlling fire ants that is not supported by the research. The ants do collect the grits, but there is no reduction in the number of ants in the colony.

Citation: Waldvogel, Michael. NCSU, 2019
https://content.ces.ncsu.edu/red-imported-fire-ant-in-north-carolina

2019 NC Agricultural Chemicals Manual
https://content.ces.ncsu.edu/north-carolina-agricultural-chemicals-manual/insect-control

Veggie Tale:

Red Hot Pepper

Jalapeno

Scoville Heat Units:

2,500-5,000

Chipotle

Scoville Heat Units:
30,000-50,000

Carolina Reaper

Scoville Heat Units:
1,500,000-2,200,000

There's just so much to know about hot peppers!!
Did you know that:

- *A quarter of the world's population eat hot chili peppers daily - they help prevent food spoilage*
- *In smaller doses, capsaicin (the zing) relieves pain, helps with weight loss and positively affect gut microbes- hmmm, chili peppers improve our lives*
- *Birds don't feel 'the burn' when they eat peppers - they swallow the seeds whole - this adaptation enables birds to successfully disperse the seed*
- *There's actually a scale - the Scoville Scale - that measures pepper heat*
- *Distinctive in taste, chipotle peppers are actually smoke-dried jalapenos*
- *Chili peppers are a better source of vitamin C than oranges*
- *You can reduce 'the heat' by only using the flesh (remove seeds & membrane)*
- *Though the tongue be burned, the sinuses are unblocked*
- *Some peppers are so hot, they are best enjoyed for their looks only*

There's just nothing quite like red-hot pepper to offer a delicious and unexpected kick to food and drink. . . .be it: salsa, cocktails, hot chocolate, stir fry, soups, nachos, margaritas, guacamole, eggs, hash browns, pepper sauces, jerk, curry, chutney. . . . hot peppers add 'the zing.' Science and pepper enthusiasts are developing new pepper breeds that are increasingly spicier, tangier and flavorfully innovative than ever before. But watch out . .the heat is on!

https://www.sciencenewsforstudents.org/article/cool-science-hot-peppers

https://mentalfloss.com/article/68511/15-spicy-facts-about-chili-peppers

https://www.thrillist.com/eat/nation/different-types-of-chili-peppers-explained

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September Gardening Tasks:

GENERAL REMINDERS

- Collect soil samples for testing so you'll know how much fertilizer and lime to add this fall.Test your lawn, flowerbeds and vegetable garden using the free kits from Cooperative Extension. Testing should be done once every 3 years.
- Clean up and throw away any diseased plant material. Do not throw it in a compost pile. Leaving infected plant material on the plants or where it fell on the ground provides a source of reinfection for next year.
- Prepare plants for dormancy. Plants need time in the fall to slow down and prepare for the winter, so do not apply nitrogen (N) fertilizer or prune after July. Consider applying potassium (K) fertilizers, which increase winter hardiness.
- Divide spring and summer blooming perennials that are overgrown, such as daisies, daylilies, creeping phlox. This is an easy way to enlarge your garden without purchasing more plants. Dig the plants, gently separate into smaller clumps and replant immediately. They'll have plenty of time to get re-established before next spring.
- Set out cool weather annuals for winter color. In addition to pansies and ornamental cabbages, other cool weather ornamentals such as dianthus, snapdragons, dusty miller, and ornamental sage look great throughout the winter. Wait to plant spring bulbs until chillier fall weather arrives.
- Start fall vegetables such as lettuce, spinach, collards, and cole crops.

LAWN CARE

- **Check out the Lawn Maintenance Calendar for your grass and learn how best to care for it.**

Click on each type of grass for link to maintenance schedule:

Bermuda Centipede Zoysiagrass St. Augustine Grass Tall Fescue

- Quick Tip for fertilizing cool season fescue lawns: Fertilize on Labor Day, Thanksgiving, and Valentine's. Fescue lawns are green and growing during the cool months of fall, winter, and spring. Use a slow-release fertilizer.
- Control Annual Bluegrass now to prevent a spring invasion. https://www.turffiles.ncsu.edu/2019/04/annual-bluegrass-poa-annua-spring-invasion/
- Plant fescue seed to fill in bare spots or rejuvenate your cool season lawn. The best time to plant fescue seed is September 15 - October 15. Contact us for a publication on lawn care and renovation and get your FREE soil samples in!
- Overseed common bermuda lawns with ryegrass in late September if you want to keep your lawn green all year.
- Control winter weeds with a pre-emergent herbicide applied around mid-September on lawn and shrub plantings.
- Prevent Large Patch disease from showing up on your lawn next year by treating for it now. Follow link to see how: https://content.ces.ncsu.edu/large-patch-in-turf
- Be on the lookout for Grey Leaf Spot and Chinch Bugs on your St. Augustinegrass.https://www.turffiles.ncsu.edu/diseases-in-turf/gray-leaf-spot-in-turf/ and Chinch Bugs https://content.ces.ncsu.edu/chinch-bug-in-turf
- To help prepare your centipede lawn for winter, apply 1 pound of potassium fertilizer per 1,000 ft2. Use 0-0-50 or 0-0-60. Do not use fertilizer that contains nitrogen.

LANDSCAPE IDEAS

- Think ahead to next fall and consider plants that will provide autumn color. Trees such as ginkgo, red maple, southern sugar maple, Japanese maple, sourwood, crape myrtle and tulip poplar have outstanding autumn foliage color.
- The flowers of Sasanqua camellias and autumn-flowering chrysanthemums contribute much to the colorful autumn scene.
- Don't forget the brilliant red foliage of rabbiteye blueberries. The berries of pyracantha, nandina, viburnum, beautyberry and many hollies provide bright accents into winter.
- Look for interesting plants in the nurseries and plant them this fall.

Trees

- Control Pecan Weevils from mid-August through mid-September. https://wayne.ces.ncsu.edu/2019/07/time-to-plan-for-controlling-pecan-weevil/

Cool Connections:

Helpful Links from Johnston County Cooperative Extension

***NEW* Cool Connections - Gardening Resources for ALL!**

Basic Steps for Home Landscaping

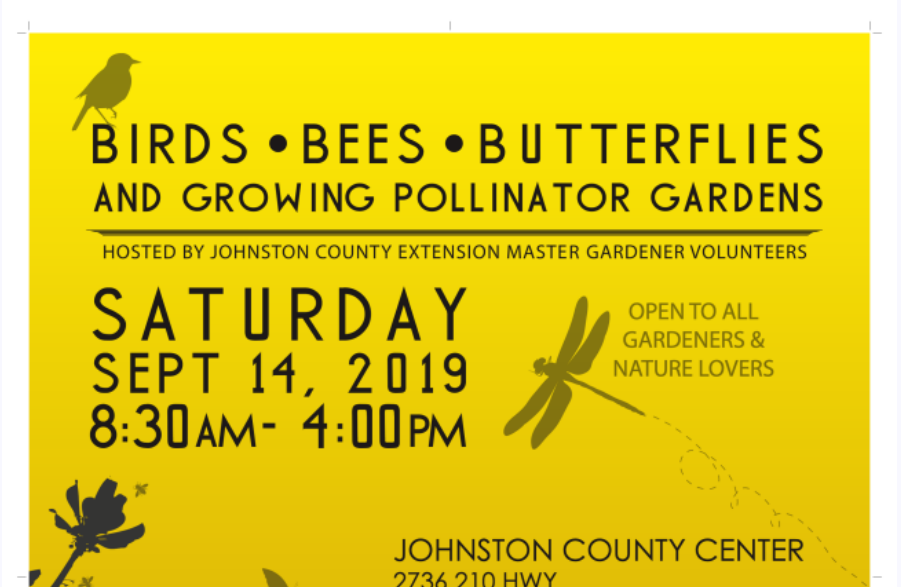
Carolina Lawns

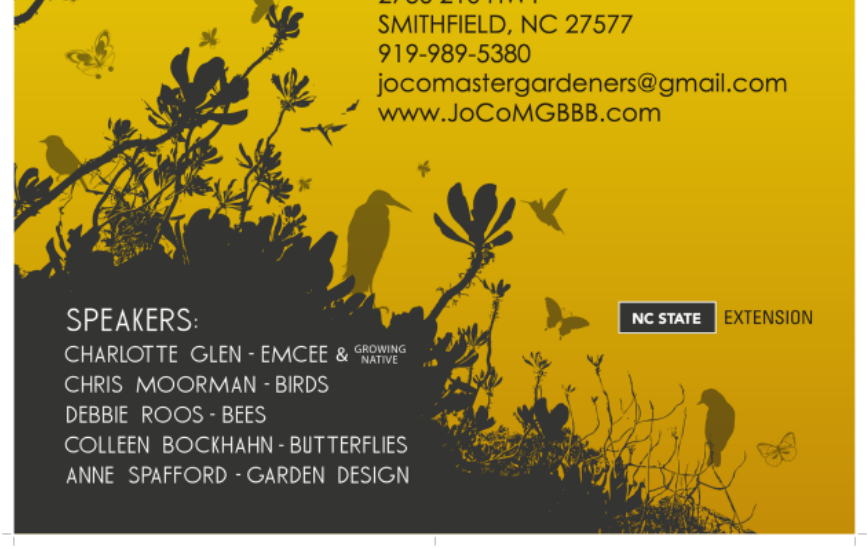
NC Extension Gardener Handbook

Vegetable Gardening: A Beginners Guide

Upcoming Events:

SOLD OUT!!!





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