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Feature Article, Feature Plant, A Veggie Tale, Quick Tip:, Ask An Expert, Garden Visits, Monthly Garden Tasks, Cool Connections, Upcoming Events





The Gardener's Dirt

Johnston County Center

April 2017

Feature Article

Deer Management in the Home Landscape

Joanne King, Extension Master Gardener Volunteer







Photo Courtesy of Pixabay

Oh, deer! That's putting it mildly! It can be months with no visible signs of ravage. Then a long cold winter, and little food in sight, the assault occurs! Why would the deer eat every single leaf off my camellias last February, but this February they were never bothered?

I was really lucky in prior years. Due to low acorn production in the prior fall and an abundance of acorns this fall, their food supply was greatly different.

It is helpful to understand their habits. Deer breed in November with the fawns born in May. When deer

have an abundant food source, they reproduce more. A doe can produce 1-4 fawns per season. A deer herd, which can exceed 120 deer, wanders within a one square mile territory.

Deer are browsers. Fertilizers and watering create the flower buds and sugars beneficial to their diet. Deer are ruminant. They consume in the browsing area (often your yard) and retreat to a safe area (the woods behind your house) where the food is processed by chewing their cud. Our landscape consists of lush lawns and plants for their food. The greenway buffer of our subdivisions provides the safe habitat or "edge" where their food can be processed.

Deer prefer leaves and tender shoots at ground level and up to five feet high. Their food consumption increases in the fall, as they prepare for the minimal food availability of winter. They depend on acorns or mast to fatten up. During periods of drought, when fewer acorns are produced, you might expect to see "extra" damage in late winter or early spring as the deer seek other food sources.

So what can a homeowner do?

Plant selection and design: When deer are hungry they will eat what is available. Don't give them good choices in the first place. Deer seem to dislike plants with aromatic properties. They seem to stay away from ornamental grasses and bulbs, or plants with a sticky or prickly leaf surface. Try using plants that deer seem to dislike near plants that are vulnerable. Use hardscape materials to minimize plantings. Use plantings in the open areas of your yard that draw the deer through your yard to the greenway.

Take extra care to protect or minimize tender annuals and perennials, like impatiens, caladiums, hostas, begonias, sedum, hydrangea, coleus. Better yet, enjoy these plants in pots on your porch/deck or plant them in places that can be protected.

Use fences and barriers: This option may be limited for some homeowners but useful in certain situations, especially vegetable gardens. A fence has to be high enough so the deer can't jump it. Also, they might be able to eat through wire fences if the openings are large enough.

Use repellants: Repellants, available in garden centers, are applied directly to the plant and repel by taste or odor. They should be applied and reapplied in periods of expected deer browsing or when the plant is sending off tender new growth. They need to be reapplied after a heavy rain. Repellants rely on stinky stuff, like rotten eggs, hot pepper capsicum and garlic. They can be convenient, but expensive. There are home brews that are cheaper and may be comparably effective. Deer get used to them, though, so try different ones.

Scare tactics: The use of loud noises, rustling of plastic bags, an old unwashed flannel shirt (human odor), security lights, motion detectors and dogs have been effective.

The bottom line is be mindful of when the deer are likely to be hungry. Protect what you have when the deer are most likely to be browsing or the plant is most desirable. Don't get hooked on one method of control. Above all, keep the most desirable deer food off the menu because if you offer it they will come!

For more information, check out these websites...

http://njaes.rutgers.edu/deerresistance/

https://www.ces.ncsu.edu/files/library/71/Deer%20Resistant%20Plants.pdf

http://cceschoharie-otsego.org/gardening/deer-resistant-plants

Feature Plant

Chinese Fringetree - Chioanthus retusus 'Tokyo Tower'

(Grown and recommended by Johnston County Nurserymen)

Marshall Warren, Horticulture Extension Agent



Photo Courtesy of JC Raulston Arboretum

Chinese Fringetree, *Chioanthus retusus* 'Tokyo Tower' is a strongly upright narrow branching tree introduced from Japan; the parent tree is 12' tall by 5' wide, and is easily grown in average, medium moisture, well-drained soil in full sun to part shade.

'Tokyo Tower' is noted for its spectacular profuse spring bloom of fluffy white fragrant flowers first appearing in April and continuing until June. The blooms appear about 2-3 weeks before that of our native fringe tree, *Chioanthus virginicus*. The flowers give way to attractive clusters of olive-like fruits which ripen to a dark bluish black in late summer/fall and persist through

the winter providing a good food source for birds.

When not in flower, the upright habit adds sculptural interest. The tan and gold exfoliating bark and the lustrous, leathery leaves look good throughout the growing season with the foliage turning bright yellow in fall. It is low maintenance and deer resistant. All these attributes make this selection a must have for the home landscape.

A Veggie Tale

Vegetable Varieties for Spring Planting

Tiffany Whichard, Extension Master Gardener Volunteer



Photo Courtesy of Pixabay

Talk to a hundred Italian grandmothers and you are likely to get a hundred recipes for tomato sauce--or gravy--as I'm told it is called. The same can be said for vegetable varieties. If you were to poll a hundred North Carolina gardeners, you'd likely have those that stand staunchly behind a certain kind of corn, or sing the praises of a specific type of bean.

In the community garden that I run, we experiment each spring season with different vegetable cultivars, trialing them in our beds to see which are most productive and reliable. For this specific article, I'll focus on vegetables that have been consistent for us, offering hearty yields and showing a tolerance to either cold snaps or heat and humidity. Please understand that this is, by no means, an exhaustive list.

Each year, we plant several smaller carrots in pots near our beds. Often this will be a Scarlet Nantes or Danvers varieties. As for radishes, I like Easter Egg for the novelty and mild taste, along with White Tip Sparklers. Lettuces range but are always inclusive of the slow-to-bolt Black Seeded Simpson and Salad Bowl. For Swiss chard, we consistently do Bright Lights. Our cabbage of choice for 2017 was an Early Jersey Wakefield and the cauliflower (which we've yet to harvest from) is Snowball. Picks for potatoes often include Yukon Golds or Kennebec. And a Dwarf Vates strain was what we installed for collards. With peas, I can tell you we gravitate toward Sugar Ann and Sugar Snaps.

Warm easean superstars for us include Black Basuty agailant. Fordbook 242 limas. Kantusky Wanda

pole beans and Contender and Blue Lake bush beans. And I would be remiss if I didn't talk about tomatoes! Certainly can't leave those out! Depending on your predilection, I would say Sweet Million and Juliet are great choices in addition to Celebrity, Better Boy and a myriad of heirlooms including: German Johnson, Marglobe, Cherokee Purple and Nebraska Wedding.

Of course, if you have more questions or if you'd like to chat vegetable varieties suited for this area, feel free to contact us.

Quick Tip:

Fix for Cocoa Mats

Brenda Clayton, Extension Master Gardener Volunteer

Love the look of cocoa mat containers but hate to water them every day and watch the water flow right thru? Here's your fix!

Take the dirt out down to the cocoa mat. Line the mat with a baby diaper or doggie pad, placing the absorbent side up, plastic side down. Replace the dirt and plant. When you water, the diaper/pad will hold the water, allowing you to go several days before having to water again. Works for me!



Photo Courtesy of Brenda Clayton

Ask An Expert

Diagnosing freeze damage on fruit

Dr. Bill Cline, Entomology & Plant Pathology, Extension Specialist (Blueberries, Muscadine Grapes)

Dr. Michael Parker, Extension Horticulture Specialists and Associate Professor (Tree Fruits) Debbie Roos, Extension Agent Chatham County, Agriculture-Sustainable/Organic Production

Q: From the past freezing weather, how can I determine if my blueberries and other fruit trees were damaged and if I will have any fruit this year?

Blueberries - How susceptible are blueberries to freezing temperatures? It depends on the growth stage: the blueberry flowers become increasingly vulnerable to freeze damage as they expand from tightly closed to fully open flowers. A tightly closed bloom can withstand temperatures as low as 24° F, while a fully open bloom can be damaged at 28° F. The stage most vulnerable to freeze damage is after the petals have fallen off and small green fruit have formed - they can be damaged at 32° F.

Unfortunately once blooms have been damaged

there isn't much you can do. They don't recover from that and they don't produce more flower buds until later in the season (for the following year). A good way to manage risk is to have multiple varieties of blueberries that bloom at different times. That way any single freeze event won't take out the entire crop.



Tightly closed healthy blueberry bloom.Photo Courtesy of Debbie Roos

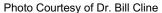
It's always good to reevaluate the damage several days after a freeze event. Often the damage is not as bad as it first appeared. It may turn out that the freeze just did a really good job of thinning the fruit!

Dr. Bill Cline says: "To determine if the freeze damaged your fruit, use a sharp knife to cut through the developing flower/berry and look for internal browning or discoloration as shown in photo.

Healthy berry with white ovules (left) versus freezedamaged. Note browning of ovules in the berry at right. Healthy undamaged flowers (left), cut open to show green ovary and style. Severely damaged flowers (right) are water-soaked after 48 hrs.











There is increased risk of Botrytis flower blight on surviving flowers and berries. Fungicides applied now may prevent additional loss to remaining flowers/fruit. If complete crop loss has occurred, consider pruning in late Spring to remove freeze-damaged shoots.

Peach and apple flowers could have been damaged from the last freeze.



Damaged apple blossom



Healthy apple blossom



Damaged peach blossom Photo Courtesy of Dr. Mike Parker



Healthy peach blossom Photo Courtesy of Dr. Mike Parker

Dr. Michael Parker says: "With the freezing temperatures we have experienced a couple of weeks ago, we are concerned about the status of our tree fruit crops throughout the state and are monitoring them closely. A temperature difference in the orchard of 3-4° F can be the difference between a full crop of fruit and excessive flower damage with no fruit on the trees. We also know that if 10-15% of the flowers on a peach or apple tree survive there is still the potential for a full crop of fruit. Peaches are very vulnerable because the first growth that emerges in the spring is the blossoms. Apples send out green leaves first followed 2-3 weeks later with the blossoms. Apples typically bloom later than peaches and produce a cluster of blooms that don't all emerge at the same time so even if some are killed in a freeze others may survive. The risk of crop loss during the early spring is one of the greatest challenges of growing tree fruit in North Carolina. To minimize these losses growers must carefully select the orchard site where they will plant the orchard, select the proper varieties, and consider options for frost protection."

See link for Debbie Roos article on Freeze Damage to Local Fruit Crops. https://growingsmallfarms.ces.ncsu.edu/2016/04/freeze-damage-to-local-fruit-crops/

Garden Visits

Gardens at the North Carolina Executive Mansion

By Deborah Crandall, Extension Master Gardener Volunteer



Have you considered a field trip to the gardens at the North Carolina Executive Mansion? You really should - they are beautiful! The Executive Mansion - "the people's house" - is located at 201 North Blount Street in Raleigh and I encourage you to plan a trip both in the fall and in the spring to appreciate all the gardens have to offer.

A volunteer guide will lead you through the grounds of the mansion - one of the finest examples of Queen Anne, cottage-style, Victorian architecture in the country. The guide will describe the bee and bird friendly landscaping and the interesting North Carolina artist sculptures you'll see throughout the property. There are four main gardens and another spot especially for children.

At the northwest gate, visitors are welcomed to a beautiful, old-fashioned Rose Garden designed and planted in 1989. You'll enter, passing under a wooden pergola covered in Trier Climbing Roses.



Photos Courtesy of Deborah Crandall

The Rose Garden is at its peak in May when roses, peonies, iris and daisies are in bloom.

Brick walkways lined with beds of blooming shrubs lead toward the house and the lawns are shaded by venerable oaks and magnolias. Small beds of hollies and dogwoods line the main walk. The flowerbeds around the entrance to the mansion reflect the spirit of a Victorian garden with colorful beds of elephant ears and cannas serving as a backdrop for more traditional southern selections of azaleas, camellias and rhododendrons.

The **Southern Victory Garden** is located on the south side of the grounds and provides a private outdoor entertaining venue. These formal beds are separated from the lawn by a bullnose brick edging. The focal point of this garden is a hand-carved limestone fountain from Italy.

The **Kitchen Garden** is located behind the mansion at the entrance to the kitchen and provides culinary herbs, floral for garnishes as well as over 20 varieties of lettuce. A brick retaining wall creates two levels for the garden. A small fountain in a niche of the lower level provides the restful sound of water while a large brick outdoor grill for summer events is located on the upper level.

One recent addition to the grounds is a **Vegetable and Cut Flower Garden** featuring a walk made of 1891 slate salvaged during the 1994 re-roofing of the mansion while a redwood grape arbor adds charm and interest. Here, vegetables and herbs are grown for year-round use in the mansion kitchen.

A **Woodland Play Area** is located to the far rear of the east lawn. Shaded by a sugar maple, the area is planted with shade-loving perennials and naturalized woodland plantings and features wooden play equipment, a birdbath and birdfeeders - all for the delight of young visitors.



Photo Courtesy of Deborah Crandall

The <u>North Carolina Executive Mansion's 2017 Spring Garden Tours</u> are scheduled on Wednesdays and Thursdays from April 5th through May 3rd.

You can schedule group tours or for general information contact the Capital Area Visitor Services: Mon-Sat (9 am-5 pm), Sun (12 noon-5 pm) at 919-807-7950 or visit http://www.ncdcr.gov/learn/raleigh-field-trips#. Mark your calendar for a great fall field trip

For more information about history of the North Carolina Executive Mansions visit http://ncpedia.org/governors-mansion

Monthly Garden Tasks

April Garden Tasks

LAWN CARE

· Grass clippings are a great source of nitrogen. Practice

grasscycling, a recycling practice where you leave the grass clippings on the lawn to return nutrients to the soil. This could reduce the amount of nitrogen needed in fertilizer for the year by 25%. Clippings may also be composted or sprinkled onto flowerbeds as long as they're not allowed to mat together.

 Warm season lawn seed may be planted toward the end of the month. Call us for a copy of 'Carolina Lawns' which tells you exactly when and how much seed to plant.



Photo Courtesy of Pixabay

TREES, SHRUBS and ORNAMENTALS

- Renew mulch around trees, shrubs, and in garden beds. Make sure mulch does not touch the bark
 of trees or shrubs and extends to the drip line of young trees.
- If rambunctious perennials have reproduced too freely, pot up the excess plants and pass them along to friends and family. New gardeners will be thrilled to receive free plants.
- Don't overfeed azaleas and camellias. These shallow-rooted plants are not heavy feeders and can
 be damaged by over-fertilizing. Submit a soil sample to determine if fertilizer is needed. Use a
 slow-release, balanced fertilizer immediately after blooming. Apply it around the drip line of the
 shrub according to label directions.
- Special fertilizers for 'acid-loving plants' are not necessary as our soils are sufficiently acid naturally.
- Watch for black spot and powdery mildew on roses common problems in our humid climate. Although these diseases make the foliage look bad, the plants generally do well anyway.
- Watch for lace bugs, the most common pest for azaleas. Look for whitish, stippled leaves with shiny dark flecks on the undersides. If found, treat with horticultural oil (an insecticide). Be sure the spray reaches all parts of the leaves and stems, including the undersides of leaves.
- Annual flowers such as zinnas, moonflowers, cleome, gloriosa daisies and sunflowers can be seeded in mid-April.
- Let spring bulbs die down naturally. Remove flower heads after the petals fade, but do not cut down the foliage. Do not fold, twist or braid foliage. Once the foliage falls over, it can be removed. Leafy companion plants can hide yellowing bulb foliage.
- Tender bulbs such as ranunculus and anemone can be dug and stored when their foliage begins to yellow.
- At the end of the month, plant summer bulbs like caladiums, lilies, gladioli, dahlias, and elephant ears.
- Prepare new flower beds by loosening and amending the soil. All plants perform better when their roots can spread in loose, organic soil. Till the soil and incorporate organic matter, lime and fertilizer - according to soil test results. Plant perennials now so they can become established before hot weather sets in.

VEGETABLES & FRUITS

- Check tender shoots of vegetables and emerging perennials for aphids. If found, spray off with water
- Watch out for and control fireblight on apple, blackberries and pear trees (including ornamental
 varieties). Affected branches look like they've been burned with a blowtorch. Control this bacterial
 disease by pruning diseased limbs back to 1 foot beyond the diseased area. Be careful not to let
 infected foliage touch healthy foliage (yes, it's that contagious), and disinfect tools between cuts to
 avoid spreading the disease. Discard rather than compost the infected limbs.
- Plant turnips before April 15. Plant pole beans, carrots, and winter squash by April 15. Cucumbers, corn,pumpkins, snap beans, watermelon, and cantaloupe may be safely planted at the end of the month.
- Thin cool weather crops that were seeded last month.
- Pick off blossoms of strawberries planted this season. Let plants mature a year before they bear fruit
- Keep tomatoes well-watered to avoid blossom end rot.

Cool Connections

NC Extension Gardener Manual

Past Issues of Gardeners Dirt

NCSU Publication Links

NC Extension Gardening Portal

NC Extension Plant Database

Going Native (Selecting and Planting Native Plants)

NCSU Pruning Trees and Shrubs

Cooperative Extension Search

Field Guide to the Southern Piedmont



Photo Courtesy of Pixabay

Upcoming Events



Johnston County Extension Master Gardeners Annual Plant Sale

April 22, 2017, 8AM to 1PM at the Clayton Community Center, 715 Amelia Church Road, Clayton.

Plants grown by Master Gardeners and local nurseries. Garden art crafts will also be available.

Mini classes: Butterfly gardening 9AM

Native plants 10AM

Square Foot Gardening 11AM Growing Tomatoes 12Noon

Pesticide & Household Hazardous Waste Disposal Day

Need to clean out the barn, the chemical storage building, pantry, or underneath the sink? On Saturday, **April 29, 2017**, North Carolina Cooperative Extension in Partnership with Johnston County Solid Waste and the NCDA will hold a Pesticide and Household Hazardous Waste Disposal Day. The event will take place at the **Johnston County Livestock Arena** at 520 County Home Road in Smithfield from **8:00 AM to 1:00 PM**. Acceptable items include old and unused

homeowners, and all types of household batteries i.e. Nickel-Cadmium, Lithium, Alkaline and Metal Hydride. In addition, we will be accepting oil base paint only from the public, but not latex. Oil base paint has a volatile organic odor and can only be washed-off with solvent, such as mineral spirits or kerosene. Latex paint, however, will wash-off with water. If the label is still attached, it will indicate oil base vs. latex.

NEWSLETTER EDITED BY: Silvia Caracciolo and Katie Maynard

*** If you would like to receive this newsletter monthly via email, send an email to mhwarren@ncsu.edu asking to be added to "The Gardener's Dirt" email list.

For accommodations for persons with disabilities, contact Bryant Spivey at (919) 989-5380, no later than five business days before the event.

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Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact your county Cooperative Extension agent.

Contact: **Marshall Warren**, Extension Agent Commercial and Consumer Horticulture

2736 NC 210 Hwy, Smithfield, NC 27577 919-989-5380

f Home Horticulture in Johnston County. NC

Johnston County NC
Extension Master
Gardener Volunteers