

The Gardener's Dirt Newsletter

April 2019

Feature Article:

Seeding Warm Season Grasses

By: Phil Jones

Extension Master Gardener Volunteer



When first asked to write this article, my immediate response was that, in my opinion, starting a lawn by seeding warm season grasses is the most expensive, labor intensive way to plant any turf grass! How did I arrive at that conclusion? I have done it! And would share with you (right up front) that the experience has made me a believer in laying sod.



Glyphosate, dispose of debris & rotovate



Amend, rake in 1" compost, level



Broadcast seed/sand mixture - soil temp 80°+



Rake to cover, spread straw, water daily

However, as this is my assigned task, I am providing you a step by step procedure for planting these grasses and let you make up your mind about it. REMEMBER TO DO A SOIL TEST and follow amendment recommendations!

1. Research & purchase the seed of your choice. Warm season grass seed is expensive (20 years ago, I paid \$400 for 4 lbs. of Zoysiagrass to seed 4500 sq. ft.) The seed is very small and must be mixed with sand to broadcast/distribute evenly.

2. Warm season grass seed germinates only when the soil temperature is 80°F - so wait for favorable conditions.

3. Use a glyphosate- based product (Roundup) to kill weeds. Mix glyphosate at the recommended label rate. Read the product label to assure that it is NOT extended control, but with a half-life of 48 hrs.

4. Rake all the debris out of the area. Rotovate, soil test nutrients and lime recommendations and add at least 1" of yard waste compost into the soil.

5. When the area is prepped, leveled and the soil temp is 80°, mix the seed with bagged sand thoroughly and broadcast the mixture by hand - don't get the mixture in flower beds, etc. (can use drop spreader)

6. Lightly rake the seed into the soil and cover with loose hay.

7. Water every day for about two weeks after planting and every other day for the following month after that.

Understanding and maintaining your warm season turf. Warm season grasses:

a. are drought-tolerant - go dormant during periods of no or little rain

b. core aerate when grass is actively growing. When aerating, the core plugs can be cut back into the lawn as a part of the mowing cycle.

c. fertilize the recommended rate and frequency of your type of warm season grass. See links below.

d. mow at the recommended height for your type of warm season grass. **See links below.**

It is my opinion, from my experience, sodding is much less expensive and is the route to an instant yard! Do bear in mind that the soil prep work has to be completed whether you seed or sod. Good luck growing your lawn and enjoy the result!

[Bermuda Grass Lawn Maintenance Calendar](#)

[Centipede Grass Lawn Maintenance Calendar](#)

[St. Augustine Grass Lawn Maintenance Calendar](#)

[Zoysia Grass Lawn Maintenance Calendar](#)

Feature Plant:

Illicium parviflorum 'Florida Sunshine'

By: Joanna King

Extension Master Gardener Volunteer



You would probably think that an evergreen shrub that was not green year round, but rather a brilliant yellow, had something wrong with it. Diverse color is what makes the *Illicium parviflorum* 'Florida Sunshine' so spectacular. Translated "small flower anise shrub", this shrub was developed by Tony Avent of Plant Delights from seedlings obtained from a Florida plantsman, Charles Webb in the year 2000. Introduced in 2016, this medium, slow-growing and shade-loving shrub has distinct seasonal color change. In spring, small white flowers appear as the leaves begin their change to their chartreuse yellow leaves of summer. The leaves change to bright yellow in the fall, and fade to creamy-tan for their winter display, contrasted by the red hue of the upper stems.

Photo taken at Choice Plants Garden

Johnston County Agricultural Extension,

March 2019

Veggie Tales:

Never Surrender in the Quest to Follow Nature

By: Barb Barakat

Extension Master Gardener Volunteer

The natural world differs from our yards in its diversity. Diversity supports a huge variety of insects and that creates a balance in the predator/prey relationship. This means that in nature insect populations are kept in control by limited food source and carnivorous insects dining on plant-eating insects -- a natural balance.

Most of our gardens are small, high-density plantings of similar crops and/or ornamentals. . . . a virtual food fest for herbivorous insects. Infestations are why most gardeners see insects as 'the enemy'; yet beneficial insects outnumber pests by 9:1. We can work toward correcting the balance by following nature - planting a variety of natives, annuals & perennials, specifically cultivars that are known to attract beneficial insects.

It is so much easier to just go out and puff Sevin (or the chemical of your choice) on everything; but we know that synthetic insecticides are non-discriminatory, they kill all insects, good and bad - this is NOT following nature. So what are some strategies for eco-friendly gardeners? What do we look for? What can we do?



Ground Beetles



Lace Wings



Praying Mantis



Lady Bug



Bees



Larva Pupa



Wasps



Spiders



Non-Insect Insect Predators

Integrated Pest Management (IPM) is an ecosystem-based strategy based on prevention, monitoring and control thru common sense practices. The goal is to suppress pest populations while being environmentally mindful.

- **Be proactive**

- Always remove plant debris from the garden area - pests winter over
- Use floating row covers - remove when plant flowers for pollination
- Keep mulch 2-3" from plant stems
- Improve garden diversity - herbs work great or see link to list below. Think early, mid and late bloomers & about providing water
- Don't use lures (bait traps) - all the neighborhood's pests will come to your plot

Scout - close daily observation and immediate response to insects or their damage - if you pick bugs before they mate, you'll have less. Eggs are easier to remove than nymphs that scatter everywhere. Look on underside of leaves & on soil

Always have ready a bucket of soapy water: Pick bugs off and deposit them into soapy water to kill them. Remove eggs, drop in water. (I keep the lid on my soapy water bucket so frogs don't jump in & drown)

Spring Garden Insect Pests & Eco-friendly Control Strategies



Grubs & Cutworms



Cabbage Caterpillars



Slugs & Snails



Aphids -



White Fly



Flea beetle

Grubs & Cutworms - pick these up when you see them in the soil. Squish, put into soapy

water or feed to chickens

Cabbage Caterpillars - spray Bt (*Bacillus thuringiensis*) - mix in single application amounts

Slugs & Snails - a small amount of beer in a cup sunk to soil level attracts them

Aphids - birds & lady bugs dine on these, spray with soapy water or puff DE

White Fly - use spray bottle of soapy water, shake the plant, spray the insect cloud

Flea beetle - nearly invisible, look for sm holes all over leaves - spray Spinosad

If you introduce any dust or spray into your garden ecosystem, do so mindfully to protect pollinators - only on a calm day, early morning or after dusk, never spray the flowers - Here are some effective, organic choices:

- DE (food grade diatomaceous earth) - abrades the exoskeleton of insects, kills slowly, only effective when dry, repeat application whenever soil gets wet
- Bt spray - *Bacillus thuringiensis* - controls leaf-eating caterpillars - mix only enough to use for a single spraying as it doesn't remain potent.
- Pyrethrins are organic pesticides found in chrysanthemum flowers. Pyrethroids are synthetic - don't choose these.
- Milky spore controls Japanese Beetle infestations - it kills the grubs, so you won't see the effect until next year - but it's effective for 10 years thereafter.
- Spinosad is made from soil bacterium that is toxic to mites and fruit flies.
- Healthy plants have 'carrying capacity' can flourish with some insect damage

There can come a time in your plant's life cycle that it simply cannot flourish due to insect infestation. This is a good time to remove these plants, burn them and plant new crop (from a different plant family).

MG Handbook
Pollinators List

Hardening Plants

By: Chris Alberi
Extension Master Gardener Volunteer



"Tomato hardening off against a rock wall"
Cristina Santiva, Flickr CC by 2.0

To increase your success rate, take time to harden the transplants before putting them in the ground. Hardening is the process of acclimating a plant started indoors in preparation for growth outdoors. It is accomplished by gradually decreasing relative humidity and reducing water. This results in a build-up of carbohydrates and thickening of cell walls.

The process should be started at least two weeks before plants are to be placed in the ground. Place seedlings outside in a protected area and gradually increase the length of exposure until they are hardened.

Source: North Carolina Extension Gardener Handbook, 2018.

Garden Visit:

Airlie Gardens

By: Cindy Stephens
Extension Master Gardener Volunteer



If you are traveling along the southeast coast of North Carolina near Wilmington, I recommend a visit to Airlie Gardens. The last undeveloped track of land along Bradley Creek, this 67 acre coastal garden features a 1.2 mile self-guided walking tour with picture perfect views of formal gardens, seasonal blooms, mature live oaks, an historic church, and contemporary art.

In 1895, the property became the home of Sarah and Pembroke Jones who named it Airlie in honor of his ancestral home in Scotland. In 1901, Sarah Jones began transforming the property into a garden estate creating lakes and tree lined paths bringing in camellias and azaleas. The Corbett family purchased the property in 1948 and maintained it until 1999 when New Hanover County purchased 67 acres for a public garden.

As you enter, visit the Airlie Oak, a *Quercus virginiana* which dates back to 1545 and is one of the largest trees of its kind in the Carolinas. Snowdrops flourished under it when I toured this March. Though 275 trees were lost during hurricane Florence in 2018, the garden looked beautifully recovered. Walking along the paved meandering path underneath moss-draped live oaks, I saw numerous varieties of mature camellias blooming throughout the garden. Airlie Gardens experiences its peak in early April with over 75,000 mostly large Formosa azaleas in bloom. The North Carolina Azalea Festival began here in the Spring Garden in 1948 and Airlie Gardens continues to participate.

Formal gardens situated throughout the property include the Pergola Garden built in 1901. It features a four-tiered fountain and steps leading into Airlie Lake. The surrounding pergola is built of tabby, a type of concrete made with crushed oyster shells common to coastal areas in that era, and is covered with yellow blooming jasmine. Completing the garden are spring bloomers including tulips, daffodils, camellias, and azaleas. With a seasonally changing bridal walk, the Pergola Garden is the most popular site for weddings.

In addition to its stunning flora, Airlie Gardens provides a unique habitat for a variety of wildlife. Part of the N.C. Birding Trail, the garden supports over 200 species of birds and is perfect for their guided bird hike, offered on the second Wednesday of each month and is included in the admission price.

More recent additions to the garden were made in the early 2000s. The Tranquility Garden features a 2700 sq. ft. butterfly house. Growing inside the open air structure are host plants including bronze fennel and *Asclepias* that support an array of butterfly species that inhabit the structure at various times including giant swallowtail, monarch, gulf fritillary, and red admiral.

The Minnie Evan Sculpture Garden built in 2005 is dedicated to a former gatekeeper of the Jones family who worked at Airlie from 1948 to 1975. A self-taught folk artist, she exhibited her works

on the lawn at the entrance gate and sold them to visitors. The centerpiece of the garden is the Bottle Chapel, made of over 2800 bottles. The honorary garden also contains artwork by other local contemporary artists in various media.

Today Airlie Gardens provides year round educational programs, summer concerts on the Oak Lawn, an oyster roast, a holiday light show, and art exhibits. The path is easily walkable and there is plenty of parking. There is a \$9 adult admission charge. The garden is open seven days a week (excluding Mondays during January and February). The location is 300 Airlie Road, Wilmington, NC. To see what is currently in bloom and to plan your visit, go to <http://airliegardens.org/>

April Gardening 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. Follow link for a copy of 'Carolina Lawns' which tells you exactly when and how much seed to plant. <https://content.ces.ncsu.edu/carolina-lawns>

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:



Helpful Links from N.C. Cooperative Extension Johnston County

Additional Informative Links

Basic Steps for Home Landscaping

Carolina Lawns

NC Extension Gardener Handbook

Vegetable Gardening: A Beginners Guide

Upcoming Events:

The Johnston County Extension Master Gardener Volunteers
Proudly Present Their Annual

Plant Sale



NC STATE EXTENSION

Master Gardener | Volunteer Association

Natives, annuals, perennials,
vegetables, herbs, house plants
& more, all grown by JoCo's
Master Gardeners! Also for sale,
trees and shrubs grown by local
nurseries, gardening books,
tools, equipment, & garden art.

Please Join Us!

8am - 1pm

Clayton Community Center
715 Amelia Church Rd.
Clayton, NC 27520

Need For More Info?:
Johnston County Extension
<http://Johnston.ces.ncsu.edu>

Proceeds help fund local JoCo schools and community outreach programs.

Pesticide Disposal Day - April 27, 2019 from 8 am to 1 pm

Need to clean out the barn, the chemical storage building, pantry, or underneath the sink. On Saturday, April 27, 2019, 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



BIRDS • BEES • BUTTERFLIES
AND GROWING POLLINATOR GARDENS

HOSTED BY JOHNSTON COUNTY EXTENSION MASTER GARDENER VOLUNTEERS

SATURDAY
SEPT 14, 2019
8:30AM - 4:00PM

OPEN TO ALL
GARDENERS &
NATURE LOVERS

JOHNSTON COUNTY CENTER
2736 210 HWY
SMITHFIELD, NC 27577
919-989-5380
jocomastergardeners@gmail.com
www.JoCoMGBBB.com

SPEAKERS:
CHARLOTTE GLEN - EMCEE & GROWING NATIVE
CHRIS MOORMAN - BIRDS
DEBBIE ROOS - BEES
COLLEEN BOCKHAHN - BUTTERFLIES
ANNE SPAFFORD - GARDEN DESIGN

NC STATE EXTENSION

To Register for the Event Follow Link: <https://www.jocomgbbb.com/>

Visit our
N.C. Cooperative Extension of Johnston County Page



NC State University and N.C. A&T State University work in tandem, along with federal, state and local governments, to form a strategic partnership called N.C. Cooperative Extension.

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

NC State and N.C. A&T State universities are collectively committed to positive action to secure equal opportunity and prohibit discrimination and harassment regardless of age, color, disability, family and marital status, gender identity, genetic information, national origin, political beliefs, race, religion, sex (including pregnancy), sexual orientation and veteran status. NC State, N.C. A&T, USDA and local governments cooperating.

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