

The Gardener's Dirt

JOHNSTON COUNTY CENTER

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Feature

Vermicomposting

Valerie Little, Master Gardener

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Vermicomposting...What is that?

Let me tell you about a few of my friends called red wigglers! Red Wigglers, or *Eisenia fetida*, are the common vermicomposting worm available in North Carolina. In an environment of dark, damp media filled with food sources and an air source, these fantastic guys will consume twice their mass of organic kitchen refuse in a single day. They will turn your garbage into fertile castings that have the perfect combination of fertilizer and microorganisms to feed your veggies, flowers and potted plants.

Vermicomposting is very simplistic and there are some great resources out there to guide you in this awesome endeavor. A favorite site of mine is <http://www.bae.ncsu.edu/topic/vermicomposting/> Here you will find the how to for building your own vermicomposting bin, the dos and don'ts for feeding the red wigglers

and the best way to keep them happy and alive!

Red Wigglers start out as eggs. As the egg matures it goes from milky white to a golden translucent egg. After hatching, the baby worm will consume more and more each day until it reaches maturity at 3 months. Then it will begin to produce eggs, one a week for 3 years. Under perfect conditions, the eggs will hatch and live fruitful lives!

These guys prefer organic substances like chopped up fruit, veggie peels, crushed egg shells, old coffee grounds, tea bags - hair and dryer lint work too. For a bedding layer, I use shredded newsprint that is dipped in water and squeezed out. This damp material is put over the organic substances to maintain moisture levels and to keep out gnats and smells.

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Once the worms have consumed the food, the box will smell earthy and you will find black castings all over the place! To add new food, I push the castings to a corner, and build my organic food layer again, making sure to have plenty of bedding material covering the food source. The worms will eventually migrate to the food source and the castings can easily be harvested.



Photo courtesy of Valerie Little

Your compost bin should be kept in an area where the temperature stays above freezing and below 84 degrees Fahrenheit. I prefer to keep mine in the garage and sometimes in the spring and fall, outside near the house. I typically feed my guys once a month and harvest two or three times a season, as I need to feed my crops and blooming plants.

The castings are awesome and are one of the best sources for plant food. Because of the microorganisms, the nutrients are readily available to the plant! Just a teaspoon per plant per month will do the trick. Seeing the plants perk up, grow straighter and have

bolder blooms will make a believer out of you in no time. Another great delivery system of castings is to make a compost tea. Take a few teaspoons of castings and dilute in a 5 gallon bucket. Mix your solution and generously water crops, blooming shrubs, even trees.

I got started in vermicomposting nearly 9 years ago from a Master Gardener in Wake County. I attended her workshop and she donated my first batch of worms. Since then, I've taught vermicomposting several times to fourth thru sixth graders in clubs, homeschool co-ops and 4-H Gardening camps and I have given away hundreds of worms. My bin even helped one of my daughters start eight new bins as she began a business creating beginning compost bins for worm enthusiasts. My other daughter caught the entrepreneurial bug and sold the castings for \$1 an ounce! Worm poop rules, my friends, and it brings in the dough!

FEATURE PLANT

Pieris

Pieris japonica

Tina Stricklen, Master Gardener

If you are looking for a broad-leaved evergreen shrub that puts on showy blooms from March through April, and offers beautiful bronze to red new growth, then look no further than the Pieris. Most would agree that the Japanese Pieris or lily-of-the-valley bush is the showiest of the species. Dripping with blooms that bees love, the buds open into 3 to 6 inch long tresses of upside down urn-shaped flowers. Later the blooms develop into small capsules that persist through the winter. New growth, depending on the variety, starts bronze to deep red and matures to a glossy dark green. Leaves are arranged alternately

along the stem and mature to 1 to 3.5 inches long. These attractive shrubs can grow up to 8 feet high with equal branch spread, depending on the cultivar.



Photo courtesy of Wikipedia

There are many different and gorgeous cultivars in the trade that include 'Mountain Fire' desired for its compact habit, exceptional fire-red new growth and white flowers. 'Valley Valentine' has beautiful rich maroon flower buds that open to deep rose-pink flowers and 'Variegata' has showy leaves that are edged with white. 'Brouwer's Beauty' is a lace bug resistant hybrid that has yellow-green new foliage.

Japanese Pieris grow best in partial shade and are hardy to zones 5 through 8. Moist well-drained acidic soil similar to azalea and rhododendron locations are best, making Pieris a great companion to these plants.

Unfortunately, Pieris is susceptible to a handful of pests, not the least of which are lace bugs and mites. These leaf feeding insects cause yellowing and premature defoliation. Effective treatment for the sap-sucking insects include insecticidal soaps or horticultural oils but be sure to follow the instructions on the label. Pruning out damaged leaves and branches keep the

plant tidy and attractive. Bear in mind that next year's flower buds are developed by July or August, so prune accordingly.

Don't let the possible insect problems deter you from trying this gem of a shrub. Adding Pieris to your part shade garden gives a touch of elegance with their interesting strings of blooms and dramatic new growth.

References

<http://www.bartlett.com/resources/Plant-Health-Care-Recommendations-for-Pieris.pdf>

Dirr, Michael A., *Dirr's Hardy trees and shrubs: an illustrated encyclopedia*, 1997, Timber Press, Portland Oregon.

Quick Tip

Unique Spring Bulbs

Eloise Adams, Master Gardener



Photo by John Lonsdale

Daffodils are probably THE most popular Spring bulb, but there are so many others to try! The *Tulipa clusiana* (Lady Tulip) seen here is a vigorous perennial which has an undemanding nature. It prospers best in well-drained, gritty, composted soil.

It readily multiplies and ranks as one of the prettiest species of the genus. Others to consider are *Chionodoxa* (Glory of the Snow), *Leucojum aestivum* (Summer Snowflake), and *Anemone* (Windflower). Thanksgiving is the ideal time to plant.

Reference:

"Garden Bulbs of the South" by Scott Ogden.

Good or Bad?

Fall Cankerworm

Alsophila pometaria

Jeff Morton, Extension Agent

Fortunately, the Fall Cankerworm (commonly called an inch worm) is only seen occasionally on trees in the central part of North Carolina, whereas it can occur in significant numbers in more northerly states. Sizeable numbers have shown up in 1992, 1998, 2008 and 2012 in the Charlotte area causing localized outbreaks requiring monitoring and applications of insecticides. In these areas, tree banding in November and December using a tar paper band - a piece of insulation and glue (Tanglefoot) - is an effective way to monitor for the presence of adult female cankerworms which are a wingless moth. Sounds strange, but yes the male moth mates with the wingless female moth who then has to walk up the trunks of deciduous trees to lay her eggs on the twigs and small branches. The cankerworm survives the winter as these eggs and then hatches in the spring as trees begin to bud and leaf out. Thus a ready food supply is on hand for the young caterpillars to feed upon which they are happy to do. The cankerworm has a smooth body and does not build any type of silk tents in the crotches of trees.

It crawls using a measuring movement typical of inch-worms. It can vary in color from light green to dark brownish-green with white or black stripes running the length of its body.



Image courtesy of youtube.com

<https://www.youtube.com/watch?v=0KLdKfQloSk>

Cankerworm larvae or caterpillars are the damaging stage of the insect and feed on the foliage of a wide range of hardwood trees - oaks, maple, basswood, beech, birch, cherry, boxelder, dogwood, elm, hickory and many others. They are voracious feeders, leaving only the midrib and major veins of the leaves intact. They can defoliate an entire tree. Fortunately, most deciduous trees can tolerate a significant amount of defoliation for a couple of years with little lasting effect. However, repeated defoliation over several years in a row can weaken trees. Often infestations of the caterpillars are primarily a nuisance to the people. After hatching in March to April, the young worms rapidly mature in 5-6 weeks. The worms become a nuisance when they spin silken threads to lower themselves to other branches to feed, to blow from tree to tree, or to the ground to pupate.

Efforts to use tree banding as a control measure has had mixed results in different portions of the country.

Chemical sprays using *Bacillus thuringiensis* (Dipel, Thuricide) a naturally occurring bacteria have proven effective if initiated when larvae are small (less than ½ inch). Other labeled insecticides are carbaryl (Sevin), cyfluthrin, spinosad, bifenthrin, malathion, esfenvalerate or permethrin.

References:

NCSU ENT/ort-153 Note Fall Cankerworm
Penn State Extension Fact Sheet Fall Cankerworm
Univ. of Minnesota Extension Insect Note Fall Cankerworm

Be Creative, Grow Native

Climbing Carolina Aster

Ampelaster carolinianis

Margy Pearl, Master Gardener

Returning from a wonderful family trip a few years ago, we decided to visit Old Salem. While walking down one of the lovely historic streets, my husband uttered those three words that always make my heart skip a beat: “Fall Plant Sale”! I spent the next hour happily buying many native plants including the fall-blooming Climbing Carolina Aster, the only native aster with a woody stem. Growing at right angles, the thin stems of this deciduous vine scramble, rather than twine, to search for a way up a structure or shrub. If none is found, it will actually interweave to form a natural lattice!

Climbing Carolina Aster tolerates wet to dry soil, heat and humidity with ease. The quart-sized plant we purchased that day has thrived and seeded itself to provide “volunteers” for the annual Johnston County Master Gardener Plant Sale!

For the best growth and bloom, we planted it in a sunny spot with compost-amended soil where it has rapidly found its way up a 12 foot trellis to reach its full height.



<https://plants.ces.ncsu.edu>

Since late September, hundreds (maybe even thousands!) of small, lavender, yellow-centered blooms have literally covered the vines. Planted near an entrance, we can enjoy its beauty and delightful fragrance which attracts large numbers of beneficial insects, bees and butterflies who enjoy feasting on its essential fall nectar. American Painted Lady butterflies even use the foliage as a larval food plant!

Ignoring light frosts, Climbing Carolina Aster blooms beginning in late October. Rather than pruning in the winter, cut it back by ⅓ when new growth appears in the spring. In 1788, botanist Thomas Walter of South Carolina recorded the native Climbing Carolina Aster. It is one of the most attractive, fragrant, fall-blooming natives today!

References:

<https://plants.ces.ncsu.edu/plants/all/ampelaster-carolinianis/>
<http://www.finegardening.com/climbing-carolina-aster-ampelaster-carolinianus>

Incredible Edible

Beets

Beta vulgaris

Tina Stricklen, Master Gardener

Beets are a real treat.
They taste earthy and sweet.
Whether pickled or baked,
They look like crimson jewels on a plate.

Some may say yuck,
Especially when it comes to borscht,
But beets in a soup aren't the worst.
Packed with nutrients too many to count,
The beet root has bonus greens that
surmount.

Try some today and you'll be surprised
That beets are good and good for you,
Your view of them will be revised!



Photos courtesy of Tina Stricken

As my poem suggests, beets are at the
apex of the nutritional-value scale.

If your only memory of beets is when your grandma put them on the table as an accompaniment, leaving you to wonder why anyone would put slick, tart purple stuff on their plate, then you should rethink them.

Every part of this plant is edible. The beet root can be boiled, roasted, pickled or eaten raw. The tops or greens can be eaten in salads, sautéed or steamed. The roots offer ample vitamin C and the leaves pack a vitamin A punch. Beets are high in folate, fiber and antioxidants. Low in calories and high in natural sugar, they are a source of energy.

Beets are a cool-season crop so they're great additions to the spring and fall vegetable garden. They are ornamental, ranging in colors from golden to red, and can be mixed into borders and flower beds. Soil pH between 6.5 and 7 is ideal. Grow in a sunny to part shade location and after they reach 4 to 5 inches tall, start thinning to make room for the roots to grow. Since beet seeds are in a seed cluster or seed ball containing up to four seeds, it is important to thin them. Being careful not to disturb the roots of the plantlets you leave behind, use scissors rather than pulling.

Here is a simple Roasted Beets recipe that is sure to win you over.



NOVEMBER GARDEN TASKS

Ingredients

12 Beets
3 tbsp. olive oil
1 ½ tsp. diced fresh thyme leaves
2 tsp. kosher salt
1 tsp. black pepper
2 tbsp. raspberry vinegar
Juice of one large orange

Directions

Preheat the oven to 400 degrees.
Remove the tops and the roots of the beets and peel each one with a vegetable peeler*. Cut the beets in 1 1/2-inch chunks. (Small beets can be halved, medium ones cut in quarters, and large beets cut in eighths.) Place the cut beets on a baking sheet and toss with the olive oil, thyme leaves, salt, and pepper. Roast for 35 to 40 minutes, turning once or twice with a spatula, until the beets are tender. Remove from the oven and immediately toss with the vinegar and orange juice. Serve warm.

*Note: wearing disposable gloves will prevent staining of hands.

Sources:

Recipe: <http://www.foodnetwork.com/recipes/ina-garten/roasted-beets-recipe.html>
<http://www.gardening.cornell.edu/homegardening/scene18f3.html>
<http://www.newworldencyclopedia.org/entry/Beet>

COOL CONNECTIONS

[NC Extension Gardener Manual](#)

[NCSU Publication Links](#)

[NC Extension Gardening Portal](#)

[NC Extension Plant Database](#)

[Going Native](#) (Selecting and Planting Native Plants)

[NCSU Pruning Trees and Shrubs](#)

[Past Issues of Gardeners Dirt](#)

LAWN CARE

- Fertilize fescue lawns for winter. The November fertilization (near Thanksgiving) is the most important one of the year for cool season grasses. The soil is still warm enough to permit the growth of strong roots that will enable the grass to withstand next summer's baking heat. Use a slow-release fertilizer formulated for turf, and apply according to soil test results.
- Soil samples are free this month. Kits are available at the Johnston County Extension Office.
- Check out the Lawn Maintenance Calendar. <http://www.turffiles.ncsu.edu/>

GENERAL REMINDERS

- Clean up and throw away any diseased plant material. Do not compost! Leaving infected leaves, fruits, nuts on the ground or on the plants provides a source of inoculum for re-infection next year.
 - Use shredded leaves as mulch. Fallen leaves contain lots of nutrients, but they decompose slowly. Help the process along by shredding or mowing them.
 - Compost your yard waste! As you cut back your perennials in preparation for winter, return that bounty to your garden in the form of compost. Compost is nature's favorite fertilizer and soil conditioner. Recycle grass clippings, leaves, and non-diseased garden refuse.
 - Put the garden to bed for the winter. Pull out all annuals that have completed their life cycle and cut back perennials.
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TREES, SHRUBS & ORNAMENTALS

- Fall is for planting! September through early February is an ideal time to plant deciduous trees/shrubs and perennials. Plant evergreen plants from September - November. The cool weather permits establishment of a root system before next year's hot weather. Find pictures of recommended planting techniques at: <http://www.ces.ncsu.edu/depts/hort/hil/hil-601.html>
- Allow space for plants to grow to their mature size. A common mistake is placing a large or fast-growing plant where there is not enough room for its full height and spread. The error results in continuous pruning in an attempt to keep the plant to a size nature never intended it to be. Find out how large the plant can be expected to grow, and place it where it can fulfill its potential.
- It's time to move shrubs from one place to another.
- Mulch shrubs/trees, perennials & herbs after the 1st killing frost for winter protection. Apply a 3" deep layer. Mulch comparisons and general info: <http://www.ces.ncsu.edu/depts/hort/hil/hil-608.html>

UPCOMING EVENTS

Fall Fruit and Nut Tree Sale will begin Oct. 1, 2015 through Nov. 13, 2015 and all orders are due with payment to the Johnston County Agriculture Center in Smithfield, NC by Nov. 13th. You can purchase a variety of fruit trees, blueberries, muscadines, and pecan trees. Pickup is from 8:00am - 5:00pm on Dec. 11th and for pecan trees only on Jan 22nd. Stop by office for order form or [Click here](#) to download form.

Become a Johnston Co Extension Master Gardener!

Calling for men and women who love to garden, would like to learn and share their knowledge, serve as a volunteer and have fun with other gardening enthusiasts! To learn more about Master Gardeners, go to <http://www.ncstategardening.org/> The training starts on Thursday January 28th, 2016. Classes will be held each Thursday afternoon from 1:30 to 4:30 for 13 weeks. Contact Marshall H. Warren for more information. Email him at mhwarren@ncsu.edu or call 919-989-5380. [Click here](#) to access the application. There will be a course fee of \$120 that will include an educational Training Manual and name tag.

Please make check payable to Johnston County Ag Center. The application and check are due by January 20th, 2016.

Mail to:
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NEWSLETTER EDITED BY: Brenda Clayton

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