

The sentence after your subject line should grab the reader's attention. Direct them toward an action, write a short summary, or present key links/information.

NC STATE

EXTENSION

Master Gardener | Stanly County

SUMMER 2019

Stanly Gardener Quarterly



Work Day at the Stanly County Historic Society and Historic Houses

Editor's Note

Dog Days of Summer

It's hot! The Dog Days of Summer are here for a while; but, just what are the Dog Days of Summer?

According to The Farmers' Almanac ... "the Dog Days of Summer describes the most oppressive period of summer, between July 3rd and August 11th each year." (No kidding!) How about we note the recorded temperatures in our Garden Journals then compare notes after August 11th.

However, most of us LIKE the Dog Days because our flowers are in bloom and our vegetables are flourishing. Even though many plants have finished blooming by late summer, quite a few pollinators are still foraging for food. Fortunately late blooming plants have evolved to provide nectar and pollen for insects as well as seeds for birds that will help them build the energy they'll need for winter.

Not unlike some plants, our Upcoming Events have simmered down to a slow crawl until it's cooler. Although we do have another Extension Master Class beginning in August.

Our EMG Community Projects are gaining momentum and making progress. Rounding out the summer events, you're going to love reading about the Houck family -- they're all winners!!!

Getting to Know Your Extension Master Gardener introduces two EMGs this month: Richard Morton and Cynthia Housel are two of our busiest, truly dedicated gardeners.

Native Plants is in full force with Laura Krug's take on their value and contribution to the environment and how every species is special.

Wanda Tyner has selected another Mystery Plant. She's finding some real beauties for us to identify or, at least, have fun trying. Yes, the answer is somewhere in this edition ... but can you find it?

My article on composting concludes this issue on summer days and activities. Putting together a compost can be simple and easy or as complex as you want it to be. My article covers the basics so you can decide which method is best for you and your gardening needs.

Happy reading!

Pat Allen, EMG

Upcoming Events

- **August 8th - Extension Master Garden Class begins.**

2019 Training -- This year's training program will be on Thursdays from 2-4 p.m. starting August 8th, 2019 and ending December 19th. There will be no class Thanksgiving or Dec. 6th.

Download the Application and submit it along with \$150 by July 26th, 2019

Fee includes: 40 hours of instruction, a hardcover Extension Gardener Handbook, supplies, and any course trips.

For application and more information, go to:

<https://stanly.ces.ncsu.edu/extension-master-gardener-2/>

Caution against a destructive invader

Look out for Spotted Lanternfly this Summer

- The North Carolina Department of Agriculture and Consumer Services Plant Industry Division is asking travelers to several northeastern states to take precautions against the spread of the highly destructive Spotted Lanternfly this summer.

For more information, select the following link.

<http://www.ncagr.gov/paffairs/LookoutforSpottedLanternflythisSummer.htm?fbclid=IwAR0Sy60s7KkPfeliZ0KO5AobO2vFSVjgAeEEjcUAFf6m9Yd7YKp2coSRJXo>

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EMG Community Projects

by Laura Krug, EMG

- **Stanly County Historical Society and the Snuggs and the Freeman-Marks Houses**

Progress is being made on revamping the period-specific gardens at the Historical Society site. Most of the garden areas have been cleaned out or weeded, and many plants have been pruned. Currently, the EMG team is on hold, waiting to see which plants raise their little heads enough to be identified. Then Kay Hawkins photographs and identifies the plants 'for the record'. Over time these photographs will be used to design the various gardens.

On May 6, Six Extension Master Gardeners, Dustin Adcock and a few members of the Stanly County Historical Society gathered at the site of the historic Snuggs and Marks Houses on Third Street in Albemarle to work on the landscaping at the site.

A tree and bush that had invaded a forsythia bush were removed. Weeds were pulled, Irises were dug up and replanted along the front fence. Herbs were planted in the vegetable garden area near the Marks House.

An ongoing assessment of plants that are appearing in the landscaping will continue. In the next phase this fall the boxwoods lining the walkways will be replaced with another kind of time period appropriate shrub, possibly gardenias.

We are in need of a carpenter to repair areas of the wooden fence. Please leave a message with lauramarykrug@gmail.com if you're interested in helping.

The group spent four hours making improvements and were pleased with their accomplishments. Look for us at the farmers market a few Saturdays this summer. We will have Fig and Rose of Sharon plants generated from cuttings at the site for sale. All proceeds to go into the garden renovation fund of the Historical Society.

- **4-H Project at the Oakboro Choice STEM School, Oakboro, NC.**

According to Richard Morton, EMG Team Chair, Junior Master Gardener classes are going well and are on schedule. Kacie Hatley Extension Agent, 4-H Youth Development, is the 4-H Chair.

Richard Morton and Laura Krug assisted the 4H Club at the Oakboro stem school in planting their vegetable garden. The club was started last year by Hannah Griffin and Christina Edwards. The plants and seeds were donated by local businesses.

- **Agri-Civic Center Gets New Landscaping**

Stanly County Extension put gardening principles into practice. April 29th was the first of many days planned for updating the front landscape.

Several Extension Master Gardeners (EMG) and the Extension Staff (ES) joined forces to install new trees, shrubs, and flowers on the east side of the Agri civic Center. The results of all the effort were gratifying even though the final step of an applying bark mulch was scheduled for another day.

The extension office staff said they planned to park on the east side of the building so they can walk by the new landscaping on their way into work.

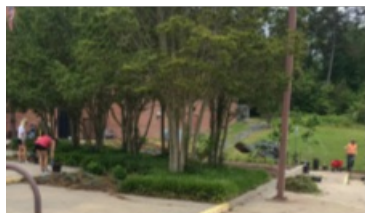
Extension Agents Dustin Adcock and Aaron Moore worked a two-man portable auger to create holes for the trees while Extension Master Gardeners Arnold Lowder and Mark McCarter each used one-man augers to create holes for shrubs and some of the flowers. The rest of the workers dug up roots from the Bradford Pear trees. After all the digging was done, everyone planted the new plants.



Work was halted during the morning while attempting to locate then dig up four time capsules that were buried during the 1990s and early 2000s. Unfortunately, despite great efforts, only two capsules were unearthed. Dustin Adcock used his skill with a



spade to excavate for the missing capsules. Did they really plant them six foot deep?



Work Day at the Agri-Civic Center.



Love of Master Gardening Runs in the Family

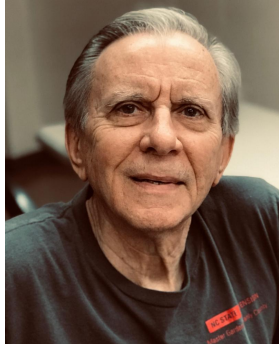
by Anne Houck, EMG

Allison Houck, eight-years-old, holds her Master Gardener award that she received for her outstanding effort in the Garden Club at Kinard Elementary School. Allison planted and cared for flowers in the school grounds. She is the grand-daughter of Anne Houck, Stanly County EMG.

Getting to know your Extension Master Gardeners (EMG)

Richard Morton

1. What made you decide to become a Master Gardener? I grew up in a



family that gardened and grew most of their own food. In recent years, my garden has not been doing nearly as good as I thought it should and I wanted to join others with similar interests to find ways of improving the quality and yields from my garden.

2. What is the most important lesson you learned during your EMG training? **I have learned how to access the tremendous amount of information available through NC Cooperative Extension.**
3. What are your main gardening interests? Are they the same as before you became an EMG? **My main interest is growing vegetables and fruits for fresh consumption, canning, and freezing. I have developed other interests since becoming an EMG, but growing vegetables and fruit remains my primary focus.**
4. What have been the greatest gardening changes you've made since taking the EMG course? **I learned that I was not pruning my blueberries, as I should and since doing so my crops have improved.**
5. What do you hope to bring to the Extension Master Gardener program this year to help us reach our objectives? **I would like to create a speakers group that can make presentations at our libraries and senior centers to educate our fellow citizens and create interest in becoming an EMG.**
6. When you're not gardening, what are your other interests? **My interests include reading, building things, home improvements, antiques, backyard chickens, bees, researching topics of interest on the internet.**
7. What would you like your fellow EMGers to know about you? **I'm a retired structural engineer and maintain my professional engineer's license. I'm an INTJ if you know anything about Meyers Briggs. I'm a LEED Accredited Professional.**
8. Where are you originally from? **Oakboro**
9. Where do you currently live? **Oakboro**



Cynthia Housel

1. What made you decide to become a Extension Master Gardener (EMG)? **My family has always had a garden. I think my grandmother could grow anything. I've always enjoyed "playing in the dirt" and thought the EMG program would help me increase my knowledge and learn new things along with meeting like-minded people.**
2. What is the most important lesson you learned during your EMG training? **It's always a learning process. Everybody has failures in the garden, and we all learn from those failures. I have learned to do my research before just buying what the local big box store offers.**
3. What are your main gardening interests? Are they the same as before you became an EMG? **I enjoy flowers. I really like finding some of the old variety of flowers that you don't see as often now. I also like bulbs. They are usually easy care with beautiful results.**
4. What have been the greatest gardening changes you've made since taking the EMG course? **I have added edibles (blueberries) to my landscape and hope to add more.**
5. What do you hope to bring to the Extension Master Gardener program

this year to help us reach our objectives? **I still feel clueless about some garden topics. After transferring to Stanly, I hope to be more involved in community activities.**

6. When you're not gardening, what are your other interests? **My husband and I enjoy attending car shows.**
 7. What would you like your fellow EMGers to know about you? **I'm a homebody. I like spending time with family and friends. I am always willing to try something new but I'm not brave when it comes to eating strange foods.**
 8. Where are you originally from? **I grew up in the Millingport community, moved away for a few years and then found my way home.**
 9. Where do you currently live? **I live in Stanfield.**
-

Native Plants

The Value of Native Plants

by Laura Krug, EMG

Today instead of introducing a native plant to you, we'll talk about why native plants deserve to have their own newsletter column. The NC Master Gardener handbook defines a native plant as one that has evolved naturally in a region without human intervention. The USDA lists over 3,900 species of plants in its database as being native plants. These plants have originated in one region and have co-evolved with other species over thousands of years.

According to the handbook, they have formed special, interdependent relationships with other organisms that are necessary for each other's survival. Choosing to use a native plant in its local region will have the best benefits to wildlife (including animals, insects, bacteria and fungi) and the environment.



Gardeners should choose native plants because of the special role they play in providing biodiversity needed to sustain our environment. Biodiversity sustains the natural processes that support all life on earth.

Plants that are non native can become invasive (Chinese privet, kudzu) and are a great threat to ecosystems. Invasive species lack the natural enemies to keep them in check. Naturalized plants are those established outside their natural range. Many common weeds and wildflowers fall under this category. They do not have interdependent relationships with their environments.

Dr Larry Mellancamp, author of [Native Plants of the Southeast](#) listed reasons to use native plants in his keynote talk to the Master Gardener college audience in June at NC State:

1. Native plants are better adapted to heat and humidity.

2. They give us a sense of place and share in our natural heritage - celebrate American plants!
3. Native plants help feed birds, bees, and insects.

His said that plant larval hosts must be native for a caterpillar to develop into a butterfly. For example, the luna moth caterpillar eats sweet gum, or the zebra swallowtail butterfly eats paw paw trees.

Dr. Mellancamp further recommends maple, sycamore and magnolias, sweet gum and black cherry trees. For flowering trees, he recommends dogwood, redbud and paw paw trees. For native shrubs: deciduous native azaleas, winterberry holly, red buckeye. And for flowers: Baptisia Butterfly weed, Tall Phlox, Cone flowers, Stokes aster, Liatris, Black-eyed susan. Joe-pye weed, Asters and Goldenrods.

Go Native!



Rare Ravine Sedge Grass has a secure home in Stanly County

by Laura Krug, EMG

On Tuesday June 25, a ribbon cutting Ceremony was held at the top of Morrow Mountain State Park to commemorate the donation of a 25 acre tract of land by the Deeck family to the State Park.

The land is located behind the Stony Hill Methodist Church and includes access to the Mountain Creek area and runs adjacent to the current boundaries of the park. Friends of Morrow Mountain State Park president Vanessa Mullinex said the donation rounds out another area of land that was recently donated to the park by Ron and Nancy Bryant and is reported to be especially beautiful.

Park Superintendent Jeff Davidson said that he plans to have a trail built from the park to allow visitors to the area. He shared that there is a rare native plant, the Ravine Sedge Grass (*Carex impressinervia*), which grows in the donated area.

See the following link to learn about this imperiled plant:

<https://www.fws.gov/southeast/pdf/fact-sheet/ravine-sedge.pdf>

The Deeck's put the property in a land trust before donating it to the park. Their generous donation was a gift not only to the park but to native plants that grow in the area. Land conservation is important to preserving our natural resources.

You can learn about land trusts by visiting

<https://ctnc.org/?s=north+carolina+land+trusts>

Can You Identify This Plant?

by Wanda T. Tyner, EMG

While out and about in Stanly County, this plant caught my eye. This beauty is one that I have not noticed before and was a mystery to me that I just had to solve. I have always loved growing plants, but since completing the Extension Master Gardener course, I am more observant and aware of plants and their beauty. I now find myself always looking for plants that are new to me. I have been on a mission to learn all I can about this plant and find some for my garden

This plant is a tall annual herbaceous perennial. Its origin is South America and is naturalized from South Carolina to Texas. This mystery plant is an upright "pop up plant" with a low clump of leaves that sends up tall, bobbing, spiky stems with clusters of small purple/violet flowers. It fills in vertical space, yet never takes up too much room. Pinching young plants when about six (6) inches tall encourages branching.

The plant season is early summer to frost. It needs full sun for full height. Mature size is 3-4 feet in height and 1-3 feet in width. It can reach up to 4-6 feet in height. This plant grows well in the Piedmont and Coastal Plain regions of North Carolina in well drained soil.

This plant is an easy no care plant and is best in USDA Hardiness Zones 7-9. It is drought tolerant so do not over water. Dead head for a long bloom period. Flower heads die out earlier without extra care.

To achieve maximum butterfly effect, it is recommended to plant in groups of 5-6. The plant does not require staking, but will start to bend if exposed to forceful high winds.

Seeds germinate in mid-spring. Due to self seeding, the following spring the gardener may have more plants than they need. Plants are easy to pull out and adapt well if transplanted elsewhere. Propagation can be from root cuttings in the spring and from seeds. It is suggested that you purchase a plant, unless you find a generous gardener who will share some of their extra plants, due to seedlings being slow to start.

Powdery mildew and white flies affect this plant when over-watered or overcrowded. Any pests or disease issues should be treated as you would for Zinnia issues. Deer occasionally cause damage.

This mystery plant is a star in a butterfly garden. It works well with some milkweed species. Egg laying females find the plant to be a convenient station to refuel. Numerous types of butterflies are attracted to this pollinator plant. Pollinators attracted include the following: honey bees, bumble bees, commas, eastern tiger swallowtails, hummingbird moths, hummingbirds, painted ladies, red admirals, skippers, Sulphur's, and giant swallowtails.



The answer is somewhere in this newsletter.

Give Your Garden the Gift of Compost

by Pat Allen, EMG

Composting is probably one of the easiest tasks around your home/garden. But before you start tossing 'stuff' in a pile, you need to know a few facts about composting. Like what is composting, what are its benefits, which materials are appropriate, are there different methods, how do you build a compost, and when will you know when it's ready.



First, composting is a process of breaking down organic materials into a product that is beneficial to soil and plants.

Composting benefits cover a wide range. Following are a key few advantages: Compost

- improves soil health & fertility,
- increases the nutrient content of soils,
- promotes higher yields of crops,
- attracts & feeds diverse life in soils,
- makes soil easier to work,
- increases soil porosity & moisture retention,
- suppresses plant diseases & pests,
- reduces the need for fertilizers, fungicides & pesticides,
- encourages healthy root systems,
- helps regenerate poor soils,
- prevents & manages soil erosion problems,
- reduces water demands of plants/trees,
- makes use of home/garden/farm waste,
- decreases waste going into the landfill,
- can reduce money spent on soil amendments, fertilizers, pesticides, etc., and
- can become a revenue stream - removing others' waste (manure, animal bedding, yard waste, coffee grounds, old produce), selling compost (requires a permit and testing).

Composting basics aren't terribly complicated, but they do involve a few terms that many people don't use every day. Decomposition is generated by mixing a ratio of the following materials:

Ratio of carbon-to-nitrogen - Carbon provides both an energy source and the basic building block making up about 50 percent of the mass of microbial cells. Nitrogen is a crucial component of the proteins, nucleic acids, amino acids, enzymes and co-enzymes necessary for cell growth and function

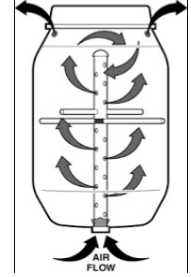
- **Browns** provide carbon and fiber, are slow to rot, and generally come from garden wastes such as dead leaves, and shredded branches/twigs.
- **Greens** provide nitrogen and moisture, are quick to rot, and generally come from kitchen wastes such as vegetable waste, fruit scraps, coffee grounds and grass clippings.
- **Aeration** caused by air circulation (oxygen) helps bacteria and other microorganisms breakdown plant material.
- **Moisture** is essential for microbial activity; material pile must be completely

moistened with 50 to 55 percent water.

A mixture between carbon-to-nitrogen ratios, moisture, and aeration generates a well-balanced compost that not only looks and smells like soil but contains rich plant nutrients and essential trace elements.

Additional factors that aid decomposition:

- A pH between 4.2 and 7.2 is best in the beginning; when it rises to between 6.0 and 8.0 compost is finished.
- Temperature between 90- and 140-degrees F helps kill disease organisms and weed seeds and creates an environment necessary for efficient composting.
- Particle size: the smaller the material the faster decomposes.
- The optimal proportion of brown to green materials averages about 30 parts "brown" (carbon-rich) to 1 part "green" (nitrogen-rich).



Typically, 'wet', or green materials such as grass clippings, food scraps, and plant cuttings contain a higher proportion of nitrogen than 'dry', or brown materials such as wood, paper, and leaves.

The ratio of carbon-to-nitrogen is 2:1 (C: N) layers of browns to greens. But what are browns and greens?

Browns (carbon) are slow to rot materials that provide carbon and dry fiber:

- fallen leaves,
- twigs and branches,
- wood chips,
- sawdust,
- paper products: used napkins and paper towels;
- soil or finished compost,
- cardboard, newspaper;
- dried flowers,
- pet or human hair,
- wood or paper pet bedding,
- non glossy junk mail, or
- dryer lint.

Greens (nitrogen) are slow to rot and provide nitrogen and moisture:

- grass and plant clippings,
- food scraps: bread, crackers, fruit, vegetable, cooked starches, jam/jelly
- coffee grounds & tea bags;
- manure (not dog/cat), or
- fish tank water.

Never add the following materials:

- meat or bone scraps,
- fish scraps,
- dairy products,
- fats, oils, or grease,
- dog, cat, humans' feces;
- kitty litter,
- weed seeds,
- charcoal ash,
- non organic materials,
- citrus rinds, corn cobs stalks, husks;
- nut shells (walnut, pecan, and almond);

- coal ash,
- automotive petroleum products,
- yard waste treated with herbicides or pesticides,
- spicy salt, or
- colored paper, plastics, metals, foils, synthetic fibers.

The different methods of composting is all about your time and your energy. Different bin shapes produce different results within a given amount of time. You need to decide which type of composting method suits your needs. Do you want to spend time working in your garden, or do you want the compost to do most of the work? The difference is in whether the compost is hot or cold.

Hot Composting: Active management process, turning materials, maintaining moisture, and maintaining heat.

- **Slatted Wooden Bin**

- Pros: Nice looking, convenient, wide slats for ventilation, modular allows expansion, metal mesh floor deters rodents
- Cons: Can be expensive, eventually deteriorates, requires rodent proofing
- Best Uses: Multi-chambers for community gardens, small ones for backyards



- **Tumbler**

- Pros: Convenient, compact, rodent resistant, holds moisture, good for kitchen waste
- Cons: Can be difficult to turn and access; often expensive, moisture adds to weight
- Best Uses: Rooftops, urban backyards



- **Bottom-Access Plastic Bins**

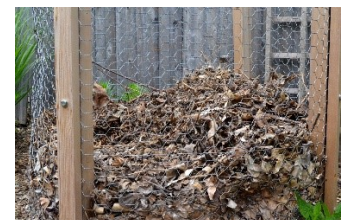
- Pros: Convenient, compact, moderately priced, sliding base d rawer for easy access, contains moisture, good aeration
- Cons: Less attractive than other bins
- Best Uses: Backyards, apartment building courtyards, small school gardens



Cold Composting: Passive management process, gradual organism breakdown, minimal seed breakdown, minimal turning, occasional watering.

- **Adjustable Mesh or Wire Bin**

- **Pros:** Inexpensive, easy to access, adjustable
- **Cons:** Not rodent resistant, must be staked in ground
- **Best Uses:** Holding leaves until your main pile needs browns



- **Modified Trash Can**

- **Pros:** Compact, secure, inexpensive, easy to create from metal or plastic trash can, holes allow for circulation/drainage,
- **Cons:** Limited capacity, easily mistaken for garbage can, difficult to harvest compost
- **Best Uses:** Urban gardens, patios, rooftops



- **Vermicompost**

- Pros: Compact size, higher nutrients/activity than microbial compost, higher value product than microbial compost, can also grow worms to sell for fishing or composting
- **Cons:** May not be able to compost large quantities, not ideal for woody materials
- **Best Uses:** Use immediately or store, soil amendment for garden or potted



plants, kick start transplants, make compost tea

After you've decided your preferred method, you need to start building your compost. For the best results, it should be higher than 3 feet but less than 5 feet. Begin with



- 4 inches of tangled branches on bare earth under
- 4-5 inches of brown then 2-3 inches of greens.

Alternate layers.

- Throw a handful of soil at each layer to introduce more microorganisms,
- top with 4-5 inches of browns, and
- turn every few weeks.

You'll know when your compost is ready when the following conditions are met.

- Original materials are not recognizable.
- Materials can be screened through 1/2 inch screen.
- Pole temperature is <10 degrees warmer than ambient temperature.
- Color is dark brown or black and smells like earth.

When pile no longer heats, cover it with a fabric weed barrier then let it cure for 6-12 weeks, misting and poking as needed. This additional time:

- results in a more chemically stable product,
- fresh compost can "burn" plants through phytotoxicity, and
- fresh compost can rob soil of nitrogen as the process finishes.

Now that you have the basic information, you may want to know more so you can make several composts. For instance, at my place we have a vermicompost (cold) for our vegetable gardens, a garden compost (cold) for spent plants, a horse manure compost (hot) for aged fertilizer, a chicken manure compost (hot) for kitchen scraps, and a goat manure compost (hot) for our grass pastures.

Yes, composting is a gift because its basic elements are given freely from Mother Nature (sun and rain), select garden and household waste, and soil microorganisms. All you have to do is put them in the correct order, allow them to get hot, add water at the right time, and stir.

Happy composting!

Resources:

<http://compost.css.cornell.edu/chemistry.html>

<http://compostfoundation.org/>

http://eartheasy.com/grow_compost.html#e

<http://ncmg.ucanr.org/files/118306.PDF>

http://web.extension.illinois.edu/dkk/eb266/entry_7027/

<http://www.compostingcouncil.org>

<https://brunswick.ces.ncsu.edu/wp-content/uploads/2016/01/Composting-Large-and-small.pdf? fwd=no>

<https://carolinacompost.com/council/>

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

<https://content.ces.ncsu.edu/backyard-composting-of-yard-garden-and-food-discards>

<https://www.almanac.com/content/how-compost-hot-and-cold-methods>

https://www.bbg.org/gardening/article/compost_bins

https://www.bbg.org/gardening/article/composting_basics

<https://www.epa.gov/recycle/composting-home#basics>

<https://www.epa.gov/recycle/composting-home#main-content>

(Answer to Mystery Plant: *Verbena bonariensis*; Common names: South American vervain; Purpletop vervain; tall verbena; Brazilian vervain)

Stanly Gardener Quarterly is a newsletter supplying gardeners with unbiased, research-based information on gardens, lawns, and landscapes. Our readers are mainly Stanly County gardeners interested in a variety of gardening types, landscaping design, and permaculture.

Written by Stanly County Extension Master Gardener Volunteers (EMG), who have been trained and certified by NC State University and NC A&T State University horticulture faculty, our goal is to offer informative and timely articles on plants, gardening, garden design, pest management and gardening products.



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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.