Guilford County Extension Community Garden Outreach, News, and Information

GardenWise

April 2018

Lions and Tigers and Bears, Oh My!

I can't remember a North Carolina spring season any stranger than what we've been through in the past month or so. High winds, torrential rains, frost warnings seemingly every other night interspersed with the occasional eighty-degree day . . . and all topped off by a tornado, thankfully a rare occurrence in Guilford County. (I truly hope all our readers are safe and sound; if you have storm-related needs, Facebook is full of resources for all those affected by the severe weather.) With luck, the turmoil of April will be a matter for the history books shortly, and we'll be able to start gardening in earnest within another couple of weeks. (Remember to wait until around Mother's Day to plant tender veggies like peppers and tomatoes!) Of course, about time the weather settles down, we'll have our usual heat and humidity (and likely a drought or two) to contend with, but obstacles have never stopped gardeners. The determination to GROW SOMETHING is one of the strongest drives I've ever observed in people, and I know folks are chomping at the bit to get out there and get growing. Best wishes for a great gardening season, no matter how bumpy the start!

Linda Brandon, EMGV

Meet Quina!

It's a pleasure to present the newest addition to Guilford County Cooperative Extension, ***Quina Weber-Shirk****. I'll let her tell you more about herself:*

(Quina sounds like "KEE-na," rhymes with Tina)

My goal is to support a vibrant network of community and school gardens throughout Guilford County which contribute to a just and sustainable food system. I do this by coordinating educational programs for community and school gardeners, including garden site visits, technical assistance with garden start-up, community organizing, garden-based curriculum and activities, and year-round sustainable gardening practices. As part of Cooperative Extension, I am here to be a resource to the residents of Guilford County -- let me know how I can best support your community gardening efforts.

Before joining Guilford County Cooperative Extension, I spent the past 3 years working with local food systems in Greensboro and High Point, with experience as a FoodCorps school garden educator, volunteer coordinator, shared-use kitchen coordinator, and Extension Master Gardener Volunteer. Having grown up in upstate New York, I am continually inspired by the possibilities of the Piedmont growing seasons.

I started in my position at Guilford County Cooperative Extension in mid-March, and am looking forward to meeting school and community gardeners across the county. If we haven't met yet, please reach out -- I would love to visit your garden and get to know each other!

Quina's contact info:

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Feathered Pests in Your Garden

Birds are a varied class, with some species more welcome in our gardens than others. For the bird watcher, bird species are distinguished by their appearance and their calls. For the gardener, the most important distinction among bird species is their diet.

Herbivorous bird species that feed on our garden produce are simply pests, no matter how beautiful their feathers and songs. Seeds and fruits are especially tasty to many bird species. The most common crops that attract pest birds are blueberries, peppers, tomatoes, and lettuce. Some birds eat freshly planted seeds and newly emerging seedlings. Insectivorous birds, on the other hand, feed mainly on pest insects, making them welcome guests in the garden. To complicate matters, some birds feed equally on pest insects and garden produce.

The section on birds in the NC State article Wildlife, https://content.ces.ncsu.edu/extension-gardener-handbook/20-wildlife#birds, gives descriptions of the most common pest birds (crows, pigeons, red-winged blackbirds, and starlings), what they eat, and measures you can take to prevent the damage they can do to your garden.

As with other types of unwelcome wildlife, barrier methods are the most effective for prevention. To protect against birds, vulnerable crops should be completely enclosed by netting. In a community garden I was part of a few years ago, we had a lot of damage from birds to our tomatoes. We put up netting but we weren't careful to firmly anchor the netting on the ground, so that birds were able to hop into the enclosure and peck at our tomatoes.

Hanging shiny objects that twinkle as they move with the breezes and reflect the sun's rays can frighten birds away. By hanging old CDs and improving the netting, we finally got the problem in the community garden under control, but not before losing a good portion of our crop.

Scarecrows or predator simulators, such as rubber snakes or owl decoys, can also scare birds away. Move the decoys every few days so the birds can't get used to them and begin to ignore them. Another possibility to save some of your crop is to provide an alternate food source such as sunflowers.

Keep in mind that with the exception of European starlings, English sparrows and pigeons, all birds are protected from lethal control methods, such as shooting or poisoning. Using such methods without the proper permits is illegal and subject to state and federal penalties.

Deborah Pelli
EMGV, Guilford County

The Plant Sale Is Coming!

The Plant Sale Is Coming!

The 16th Annual Extension Master Gardener Passalong Plant Sale is not to be missed! May 11 - 12, 2018, at the N.C. Cooperative Extension, Guilford County Center, 3309 Burlington Road. We have plants in every category - Sun Perennials, Shade Lovers, Natives, Pollinators, Succulents, Trees, Shrubs, Veggies, Herbs, Annuals, Houseplants and more. Master Gardener volunteers will be on hand to answer your gardening questions and advise you on the right plants for *your* garden. Come early for the best selection! For more information, contact the Guilford County Cooperative Extension office at 336-641-2400. **See you there!**

Kids' Corner

CREATIVE CRAZY CONTAINERS

This activity is about having fun with the unexpected. Many plants grow as well in a container as they do in the ground. **Find an unusual "pot."** Look around your house. Be creative. Old shoes, like boots or tennis shoes, are great, or an old teapot, a tin can or an old watering can. An old Radio Flyer wagon makes a GREAT planter as long as it's deep enough to accommodate the plant's root system and has drainage holes (rust often takes care of that for us). *No matter what container you choose, make sure there is some way the water can drain out so that the roots don't get soggy.* If you're planting edibles, you may want to line things like old boots with a plastic bag (with drainage holes, of course), for the sake of cleanliness.

Fill with soil, plant a seed and keep the soil moist. If the container is big enough you can let the plant continue to grow; if not, transplant it into the garden. Anything in the five gallon and up size will handle even for a tomato plant; big, bushy plants like squash look fabulous spilling out of an old watering can or a wagon.

For children who have not experienced how flowers and vegetables grow, they will delight in picking the first flower or biting into the first vegetable they've grown, and you will have kindled a love of gardening that will last a lifetime.

GETTING THE UPPER HAND ON GARDEN PESTS

By Emily Tyler, EMGV

"All insects are bugs but not all bugs are insects" as I've heard Karen Neill say. NC has 1700 pest species. Out of 100,000 insects, only 1%, or one in 1000, are considered to be pests in any backyard or garden. It is important to know beneficial insects as well as the pests so as not to harm them with the use of pesticides which aren't selective.

The first order of business is to identify the bug in question and determine if it is a pest. This article will focus on a few of the most common pests causing problems in local vegetable gardens and a few suggestions for controlling them.

Squash Vine Borer:

This pest makes its presence known by the appearance of green or tan sawdust-like frass near the base of the stems or on the runners. Another symptom is wilting of the plant. When the frass is present, a lengthwise slit can be made with a knife along the stem near where the frass is located and the worm, about an inch long, can be destroyed. Cover the damaged portion of the stem near the ground with soil and keep the soil moist. New roots may develop and save the plant.

One of the best ways to avoid the squash vine borer is to plant cucurbits early, as soon as the soil warms after our last average frost date (April 15). This will help protect plants in the squash family from squash borers because the moths that lay the eggs at the base of the plant don't appear until later (July). Other preventive techniques include floating row covers to keep the moths out. However, care must be taken to remove the covers so the flowers can be pollinated by bees, or learn to pollinate them manually.

Squash Bugs:

Anyone having a plot at the community garden at Cooperative Extension has likely seen squash bugs as well as their eggs and nymphs. Adult squash bugs are grayish brown and about 5/8 of an inch in length. Their shiny, coppery-red masses of eggs are quite distinctive, often appearing in neat rows. The eggs, found mostly on the underside of leaves but not always, are tough but can be removed by rubbing the egg mass between two fingers. This will leave a hole in the leaf but will not harm the plant. The newly-hatched nymphs are pale green and the older nymphs are gray and may show signs of developing wing pads.

Both the adult squash bugs and the nymphs suck sap from the stems and leaves. If not addressed early, the damage to the plant tissue and the foliage often causes wilting and the plant beyond the damaged areas dies.

The first line of defense is hand picking (or smashing!) these bugs at any stage, but you need to be fast! If this doesn't slow the population significantly, spraying the upper and lower leaves of the plants with Sevin late in the day has proven to be effective.

Squash bugs as well as many other garden pests overwinter in the soil, especially if any plant debris remains after the fall growing season. Practice good garden sanitation to help forestall the appearance of undesirable pests in subsequent years.

Mexican Bean Beetles:

Successful crops of pole and bush beans in the NCCE Community Garden have been a challenge in recent years as infestations of Mexican bean beetles have exploded. These pests will attack other varieties of beans as well.

The Mexican bean beetle is a type of lady beetle (lady bug) and care should be taken not to destroy the beetles or egg masses of the "truel" lady beetle which is beneficial to gardeners and their plants. The colorfully spotted lady bug has rounded shiny wing covers which may be red or orange with black spots. Learn to recognize them. The Mexican bean beetle and the Colorado potato beetle are the only "lady bugs" that do serious damage to bean crops.

The Mexican bean beetle is a small, copper-colored beetle with black spots, accompanied by bright yellow or orange soft-bodied larvae with spines on their backs. Clusters of yellow eggs may be seen on the undersides of leaves. If you notice skeletonized leaves on bean plants with only the stem showing, the Mexican bean beetle is the likely culprit. Heavily infested plants may die. The worst damage occurs in July and August if not controlled.

The best way to control this pest is to pick off and destroy the adult beetles, and smash their larvae and egg masses to destroy them. For heavy infestations, spray with carbaryl (Sevin) late in the day (to avoid harming honey bees and other beneficial insects).

Aphids and Lady Bugs

Aphids or "plant lice" compose more than 1300 species in North America. They come in a variety of colors and sizes, measuring from 1/10 to ¼ of an inch. These pests feed on an extremely wide range of plants, including some vegetables. They excrete excess sugar in a sticky "honeydew" which supports the growth of an unsightly fungus called Sooty Mold. Aphids may be killed on edible plants by spraying with insecticidal soap. This spray solution can be made with five to six drops of liquid detergent in a quart of water.

Adult lady bugs and their larvae hunt and feed on aphids, mites, and other soft-bodied insects. Lady bugs cause no plant damage and do a great job in eliminating harmful insects in the garden. To increase the population of lady bugs in the garden, avoid or limit the use of insecticides. Most pesticide formulations, from insecticidal soaps to chemical preparations, also will kill lady bugs and their larvae.

Flea Beetles:

Have you noticed tiny holes in the leaves of your eggplant, beets, broccoli, cabbage, chard, pepper, potato, radish, sweet potato, tomato or turnips? These tiny beetles which hop like fleas, thus their name, chew leaves, leaving pits or small holes in foliage. While older plants may withstand some damage, seedlings and young plants may dry out and die. Flea beetles also spread diseases such as early blight and bacterial wilt seen on tomatoes.

Adult flea beetles overwinter in weeds and garden debris. In late spring the female lays teeny-tiny white eggs under the soil around host plants. To control these pests, follow good garden sanitation practices, removing plant debris, etc., as well as rotating crops, and planting vegetables close together so the leaf cover will keep the ground moist and less attractive to egg-laying adult flea beetles. Flea beetles prefer hot and dry conditions.

Good luck in managing and controlling damage from these garden pests this year!

Garden Reports

A People of God Garden

We are so excited! Our garden is actually going to be located at the A People of God Church. We have lettuce, tomatoes, cucumbers, brussel sprouts, squash, and beets. We are looking forward to growing and learning to eat to live for us and the community. Here's a photo of just a small portion of our seedlings that we're eager to get into the garden.
Sharon Sullivan

Oak Ridge Presbyterian

We are adding potatoes this year. Kids enjoyed drilling holes in an old cylindrical recycling bin and planting the seed potatoes. There's lots of excitement about this new addition to the garden. We are also going to plant a small bed for pollinators in hopes of increasing our harvest.
Nancy Stoudemire

First Presbyterian Church

Our Giving Back Garden has been busy. First, a group headed by Glenn Williamson and Lee Atkinson went to High Point to buy 2 truckloads of compost at Ingleside Compost Facility. Then many of us helped take wheel barrow loads to the different beds to replenish. We received a truckload of wood chips as a donation, and the elder volunteers spread that around the paths last weekend. Many of the volunteer gardeners have planted their spring crops -- everything from lettuce and sugar snap peas to carrots and beets and much more. One bed is producing from being planted in the fall, providing lots of spinach and onions. We have enjoyed the rain and now will need to fertilize, thin the seedlings, and put up supports for the peas if they are not already in place. We have 23 volunteers for 12 beds, and our Congolese volunteers will have their own bed. We feel very fortunate to have all of these enthusiastic gardeners! Lee Atkinson and I are heading it up, but Glenn Williamson continues to play a critical part in keeping the garden going. We look forward to being able to report our harvest. I've included a photo of a Bee Haven constructed by Glenn Williamson. We will also be adding havens for other pollinators like lady bugs and lacewings. Also in the works is a butterfly garden, all in an effort to maximize our produce yield.
Joan Stone

Garden Reports are continued on the next page.

Garden Reports *continued*

Ole Asheboro Street Neighborhood Association
Our OASNA Garden is on MLK, and I just had the plots cleaned out and the grass cut. Our new community members are ready to start planting.
Barbara "B" Akins

New Hope Community Gardens
At this point we are at a standstill with the New Hope Community Gardens due to the extreme weather situations. Having no greenhouse, we have not begun to plant our Gardens except for about thirty- two hills of cabbages which are struggling to maintain during this harsh and bitter cold weather. We are not currently taking a chance on planting seeds; we hope that the weather will rise to a pleasant 65° or the ground reaches an even temperature for better germination of our plant seeds. This is what we have at the present time, while doing maintenance on our equipment. We are getting everything ready for the upcoming warmer days.
Reverend Richmond

World Relief
Our garden is being prepared for Spring planting. We are excited that we will have city water with 3 yard hydrants this year. This will allow our farmers to sell their goods at the City Market in High Point.
Sandy Paige

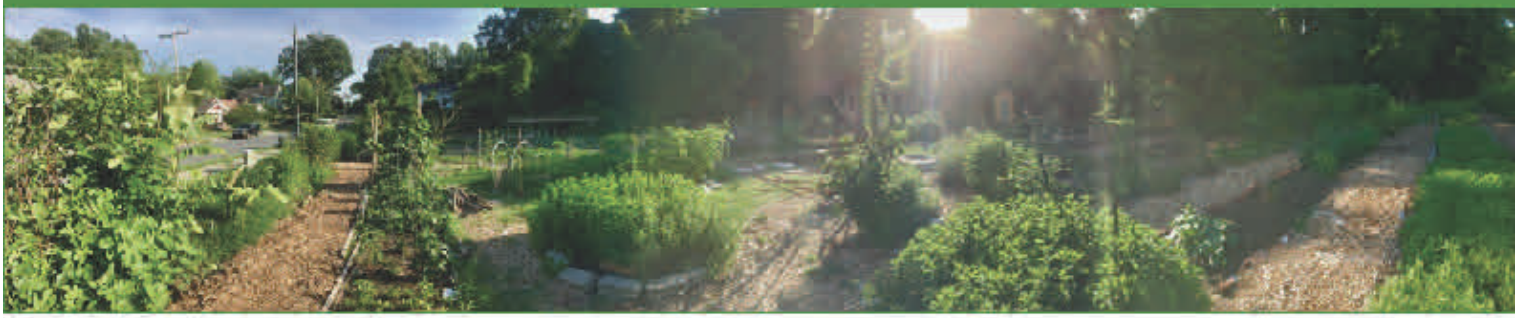
Guilford College United Methodist Church
The GCUMC raised bed garden will have a prep/planting date on April 21. We had a church member donate a tumbler-style composter so we'll add its contents. Soil test reports indicate lime needed for the three more recent beds. Most beds remained fallow this winter; we only planted spinach and carrots late summer, with the former surviving the winter even with the very low temps. We will trellis cukes and use tripod bamboo poles for the Blue Lake beans. We will give most of the bounty to Share the Harvest.
George Bowen

First Baptist Church Community
The FBC Community Garden of Greensboro held a planning session on April 9. The neighboring community was invited. Plans will be made for plots for individuals as well as production plots for Share the Harvest.
The FBC Greensboro hosted a Missions day of sharing on Saturday April 21. Events included some "Dig in" time in the garden as we prepare for summer crops.
Plans are developing for Springtime garden activities for the Preschool program at First Baptist.
This year's focus is the garden is outreach, sharing harvest, education of young children and families, growing flowers for Bereavement needs, and having fun.
Janice Newsom

Starmount Presbyterian Church
The Starmount Presbyterian Church Community Garden is slow in getting started for our tenth season of growing vegetables for the hungry - rain and cold weather have made us postpone our planting. Our crew of gardeners will be out planting potatoes, onions, turnips, and other root crops in early April.
Linda Anderson

We've taken the liberty of sharing two full pages from the wonderful newsletter from Dunleith Community Garden in this issue. Wow! What a great job they're doing! Thanks to EVERYONE who sent in a report, no matter the format; it's a treat to see what's going on throughout the county, even this early in the season.

Dunleath* Community Garden Building Stronger Neighborhoods 2017 Update



Dunleath Community gardeners had a wonderful 2017 growing season with a diverse and enthusiastic group of gardeners. We so appreciate the chance to be part of the community with the neighborhood's support, the landowner's willingness to let us use the space, and also support in water use. Three members provided a tremendous amount of volunteer help: Vickie, Betsy (and her amazing and wonderful Montagnard ladies), and Marnie. Though Esther is not officially part of the garden right now, she and Mark continue to support it and its members in many ways and we so appreciate their help. Mindy Zachary, as the neighborhood treasurer, has provided wonderful support by keeping track of the grant funds.

We have a beautiful new sign thanks to Ali and her staff, Casey, the artist, and Esther for facilitating.

A devoted group of Montagnard women in collaboration with Betsy continue to maintain three very large plots with a mixture of southeast Asian and American crops and perennial herbs and wildflowers. Crops they grow include bitter melon, cotton, and roselle (the flowers of this type of hibiscus are what give the vitamin C rich "zing" to red zinger tea). They also grow milkweed and passionflower, both of which are butterfly host plants, the first for monarch butterfly caterpillars and the second for fritillary butterfly caterpillars. The Montagnard gardeners consistently help maintain the rest of the garden, actively managing the bananas planted by Esther several years ago (they harvest the leaves for use in cooking), helping to weed the pathways, and watering other gardener's plots during times of drought, and generally pitching in wherever help is needed. If anyone in the neighborhood would like a banana plant, there are always pups available to dig up. Any growing into the pathways or fig area are fair game.

Montagnard (Degar) community garden members

We don't have photos of all those helping to maintain or contributing to the community garden, but they included gardeners and community members who either helped with pathways, the compost bins, cleaning and organizing the shed, weeding the herb garden, mowing, weed whacking, trimming trees in the garden and along the sidewalk near the garden, picking up and delivering compost, helping to unload the tons of compost, donating tools, donating wood (for the strawberry patch), donating hardwood mulch, and cleaning up. The garden shed has been wonderful and we appreciate the new plexiglass—thank you, David Wharton and Jon Evans for building it!!

Along with Betsy and the Montagnard women, some folks who volunteered regularly to help maintain the rest of the garden and orient new members were Vickie Ebright and Marnie Joyce, often tackling the compost bins (a daunting task!) to help create a usable soil amendment from the plants and weeds pulled from gardens and paths. And Vickie helped tackle a giant rug—wonder woman! Sheri was a big help in spring!

The gardens get a lot of support from within and beyond the neighborhood. Ben Berryhill mowed several times. Terri Hancock donated a beautiful pitch fork (photo page 2), as did Jennie Hunt. J.R. of J.R. Tree and Landscaping had his crew drop off hardwood mulch. Larry, a beekeeper who has happily housed many of the garden's give-away perennials, offered to pick up compost donated by the City of Greensboro since he has a large pick-up (and none of the gardeners do). Zora volunteered to help him unload it as part of her community service work, and helped us find another helper, Duncan, when no other garden members could be at hand. Dawn disposed of tires we found in the area surrounding the garden during a clean-up. Thanks everyone!

Vickie tackling black locust in Nadja's plot.

Lima learning about the garden with Marnie.

Sheri and Vickie mulching a common area of the garden.

*In 2017, Dunleith Community Garden changed its name to Dunleath Community Garden following the neighborhood's decision to change its name to Dunleath Neighborhood Association (previously Aycock Historic Neighborhood). The name was chosen based on historian David Wharton's research on the historical spelling of the garden's namesake, and after Aycock Middle School changed its name to Melvin C. Swann Jr. Middle School.

Dunleath Community Garden Building Stronger Neighborhoods 2017 Update - Page 2


Vidya rejoicing in rain post strawberry planting


Terri donating a beautiful pitch fork!


Mason taking after his mom, Tania, as a gardener.


Ray and his pal Simon helping with water.

Many Bangladeshi and Indian students are raising families while studying, so the garden is a place where they can meet with friends, grow food from home, and eat a little healthier while also saving some money. They build the trellises that support bitter melon and fava bean vines. The bitter melons have beautiful white flowers that open in the later part of the day (vs. most of the New World squash that flower in early morning and close by mid-day), and have a knobby outer surface and brilliant red interior (with some medicinal properties). I don't know the names of all the other vegetables so hope perhaps they'll let me know before I send in the grant report.

It's fun to learn how many of the international gardeners use other parts of plants. For example, some harvest not only squash flowers in addition to the vegetable, but also the leaves. As many Italian cooks know, most of the squash flowers are male flowers, only in bloom for one day, so you won't hurt the fertilization of female flowers if you collect them after they are closed about midday. Another neat plant is holy basil, or tulsi, though it is slightly different from that grown by garden members in their home countries. It's a sacred plant in some places, and we have lots of seeds each year, if any neighborhood member wants to try growing it (just stop by next summer).

The children usually love the strawberry beds more than anything, so we're very excited to have strawberries back in their original spot, now in three frames that will make keeping the grass out a lot easier. Thanks so much to Vidya for her help planting—only a neighborhood member for a little while, and volunteering at the garden, we are sorry she didn't stay. Thanks also to Sheri, Lonnie, and Walt for donating some of the wood and helping to construct the frames. The grant helped pay for additional wood for the frames and for the organic strawberry plants from Banner Greenhouses. We added some chicken wire in February 2018 because it looks like the rabbits or deer found them already—so fingers crossed they'll be able to grow back for a good 2018 harvest (the beds need a little gentle weeding at the moment, too). The strawberries are for the whole community and we especially hope children in the neighborhood will pick strawberries to experience how wonderful homegrown and fresh fruit tastes. We also encourage children and their families and friends to pick flowers from the front beds, and herbs from the herb garden. Look for "pick me" signs if you're not sure which ones to pick. Generally, just avoid picking from the interior beds (not along the sidewalk), unless you see a "pick-me" sign. The herb garden is the round bed near the middle, between the figs and the water pump.

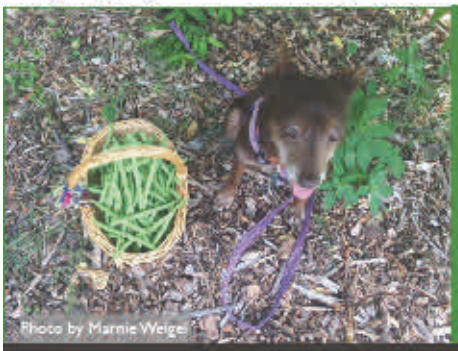
With 2017 grant funds, we also got a new wheel barrow, an electric edger (weed whacker), additional hand tools (weeders, sheers, a rake), new hoses, cover crop seeds, some lower stature perennial plants for the front bed, and some wood for edging (to keep grass weeds from encroaching).

Seeking gardeners & other help:

We are loosing many gardeners from the 2017 growing season, so welcome community members to apply. All community garden members are asked to contribute to the upkeep of the garden. We have a garden listserv that is open to anyone interested in being a gardener or volunteering.

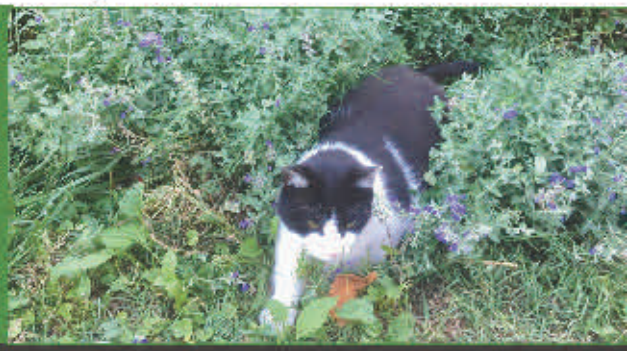
Thank you & looking ahead...

We had a great year and appreciate the community's support so much! We have left plant materials in many beds over winter because they provide food for birds, but will clean these up in early spring. We hope to join the community's trash cleaning efforts more regularly and help clear out trash in the woods behind and around the community garden. We also hope to have some social activities this year in the community garden and invite the whole neighborhood. It would be nice to hear from those of you who grew up in the neighborhood and learn more out the garden site's history as a go-cart ring, learn if there's anything we can do to make the garden a better community space, and share some garden delights together. Perhaps we can make the community garden one of the porch fest spots.



Violet anticipating fresh picked green beans!

Please pick the flowers!!


C.A.T. keeping an eye on the catnip.

Please send comments about the garden or photos to share for the Building Stronger Neighborhoods report to dunleathgarden@gmail.com.

Vertical Gardening

Written By N.C. Cooperative Extension

Going up! If garden space is limited, vertical plantings may be an option to use and can be a wonderful addition to a raised bed or container garden. Whether you utilize a trellis, cage, stakes or poles to support growing plants, you are vertical gardening.

For vegetable gardens, sprawling plants like pole beans, cucumbers, snow peas and tomatoes are great to train vertically. This allows space for other vegetables to be planted nearby, and more importantly provides added air movement to limit foliage diseases and ease of harvest for the vertical growers.

Trellis systems can be constructed using materials that you already have on hand or looking at items that could be "recycled" into a trellis support. Willow branches, bamboo canes or other flexible prunings can be used to create a twig arbor for a container, tee-pee support, or simple lattice for climbers. Three- to four bamboo canes can be lashed together forming a tee-pee or A-frame structure for plant support. A discarded window frame (without the glass panes), baby bed box springs, or a piece of used lattice can all serve as vertical plant supports. Or they can be slightly angled to create a shade area underneath them for additional plantings. Garden twine, fishing line, or nylon string can be attached to trellis systems to provide more support. Some plants without means of attaching themselves may need to be tied to the support structure. Keep the ties firm but loose enough to allow for the growth of the plants.

Wire cages are also an option and usually are constructed of strong hog fence wire. To add a little color to the garden, tomato cages can now be found in red, blue and yellow.

Site your support structure at the north or western side of the garden or raised bed. This helps to limit shading of the other vegetables.

Remember, regardless of what type of vertical support system you select, make sure it's secured properly. When visiting other gardens take time to observe their trellis systems, you may find a new version to use for your own garden.

Whether it's noodle beans, pickling cucumbers, cherry tomatoes, Malabar spinach, or enjoying the flowers of black-eyed Susan vine tucked into the vegetable garden trellis system enjoy "growing up!"

Fertilizing Your Vegetable Garden

Linda Brandon, EMGV

*(We'd love to think that all our readers print out each issue of **Garden Wise**, placing the precious copies in a special binder so they can easily be referred to. That's not reality, though, is it? For this reason, we're reprinting articles that are always timely.)*

When planning your vegetable garden, take a few minutes to consider what we expect of our plants. Visualize those ripe, juicy tomatoes bursting with energy. When you think about it, it's apparent that few plants in our landscapes are expected to do *nearly as much* for us. But just as you and I can't function productively day after day and week after week without proper food and nutrition, plants need nutrients, too. Unlike us, though, they can't head to the kitchen for a delicious and nutritious dinner when they're "hungry." They're stuck where they are, relying on us, the gardeners, to provide what they need.

But how do we know *what* to feed our veggies, and *how much*? It's simple: *be sure to do a soil test for your vegetable garden area each year before planting time*. This free service, provided through the Cooperative Extension Service and the NC Department of Agriculture (call 375-5876 and ask to talk to an Extension Master Gardener for details on how to test *your* soil), will tell you exactly what nutrients your garden needs, and what formulation of fertilizer in what quantity will provide those nutrients.

Your plants will need three major elements: nitrogen for healthy plant growth; phosphorus for strong root formation, cell division, flowering, and other functions; and potassium, which helps the plants regulate water and perform photosynthesis (converting sunlight to energy). Minor nutrients like zinc, copper, manganese, and others are also important, but we're focusing on the "big three." Fertilizers are labeled with three numbers, such as 10-10-10, 5-10-10, 3-2-6, and so on, and each of those numbers indicates the percentage of nitrogen, phosphorus, and potassium contained in the product. Your soil test will give you a specific recommendation for a fertilizer formulation to use in *your* garden; if you can't find a formula that matches that prescription exactly, just get as close as possible.

If, for some reason, you need to start your garden before you have soil test results, the experts at NC State Extension suggest that you use a complete formula fertilizer, like 8-8-8 or 10-10-10 at a rate of 20 to 30 pounds per 1,000 square feet of garden space.

It's best to fertilize your garden *before* planting time, working the fertilizer into the soil to a depth of several inches. A light side-dressing – applying fertilizer beside the plants between rows – during the growing season is recommended for some vegetables, as well; we have specific information on growing more than 30 vegetables and fruits in handy brochure format here at the Extension office, and those brochures contain specific recommendations for each plant.

Plants don't particularly care whether they're fed organic or synthetic fertilizers; nutrients are nutrients to them. Organic products tend to have lower potency and act more slowly. Think of organic products as "feeding the soil" to increase soil health rather than "feeding the plants" themselves. And understand that disease and insect problems will generally *not* be helped by fertilizer application, although plants that are receiving proper nutrients will be better able to withstand problems cause by both pests and diseases.

One really important thing to remember, especially in our "more is better" mindset: Adding twice as much fertilizer as recommended will *not* make your plants grow twice as well. In fact, it may have the unfortunate side effect of damaging or killing otherwise healthy plants *and* leaving the soil unusable for several years, until the fertilizer is leached out of the soil through rainfall. Same goes for all lawn and garden chemicals, for that matter. Believe me, if manufacturers thought they could sell more product by suggesting that you use more than the label calls for, they'd be incorporating that into the labeling. Instead, please – *always* – read the label carefully and follow those instructions exactly. Don't hesitate to call the Extension Master Gardener Infoline at 336-641-2404 if you have additional questions. Your plants, and your environment, will thank you for using chemicals wisely.

Keeping Community Gardeners Engaged

(This article first appeared in 2016, but it's about a topic that is always timely.)

April. Everyone is excited about the new planting season, cheerfully digging, tilling and planting, enjoying the seedlings popping up in your community garden and anticipating a bountiful harvest.

Late July. Those same gardeners are complaining about the heat, complaining about the weeds, feeling overwhelmed by the tasks they face, and not showing up to work as often as they need to keep your garden in shape.

Gardeners enjoy the garden, but sometimes there is some burnout. To keep them engaged throughout the season the garden leader needs to keep them informed. Every week send out an email letting them know what is happening in your garden. Or, establish a message board at the garden. Consider setting up a Facebook page for easy communication among members. Assemble an email list or a phone tree to make communication easier.

In those updates tell them about jobs that need to be done, pests that threaten the garden, what is being planted and harvested, who is going away on vacation and needs their plot tended and harvested. Remind them about the rules that were set at the beginning of the season if some folks are slacking off.

At your garden, plan for learning. Many of your gardeners may be new and they appreciate the information that can be provided about growing plants of all sorts. Seek out an EMGV to teach about timing, fertilizing, watering, pest identification and harvesting. Have a workshop of activities folks can do at the garden: birdhouse construction, painting plant stakes, building tomato cages. Encourage families with young children to participate. Invite them to come especially on days when you are planting seeds that are big, "Big Seeds for Little Fingers." Encourage families to take some seeds home to plant.

Promote friendships by having social events. Highlight special harvesting: digging potatoes around the Fourth of July is a popular day at our community garden. It's like a big treasure hunt. Other social events that you can consider: cookouts, potluck breakfasts before a workday, watermelon seed spitting contests , a tomato sandwich supper in mid-July when everyone has too many tomatoes, a movie night in the garden (set up a sheet for a screen, ask families to bring blankets or lawn chairs and watch a movie under the stars.)

During the summer you can prepare to keep gardeners engaged in the off-season in a few ways: freeze basil in Ziploc bags, harvest and dry sunflower seeds to use in bird feeders. Pass these out in November and watch faces light up with summer remembrances. In December make ornaments out of dried okra pods. Plan for a gardening workshop in February to get folks excited about the coming season.

Linda Anderson, Starmount Presbyterian Church Community Garden Leader

Growing Sweet Potatoes

(Editor's Note: In what I think is a bit of delicious irony, North Carolina is the nation's leader in sweet potato production . . . . but I cannot find a single article from NC Cooperative Extension about growing these rascals at home or in a community garden, only as a large-scale production crop. So I headed to neighboring states to see if they had any good, relevant info, and UGA provided this piece. Thank you, Georgia! Our climates and growing conditions are similar enough that this information should translate well to North Carolina gardens.)

Georgia is the perfect place to grow sweet potatoes (*Ipomea batatas*). Sweet potatoes are considered a long season crop and Georgia's long, hot summers allow them to grow and mature well here. You might consider adding sweet potatoes to the crops you plan on growing in your garden.

The sweet potato is a Native American plant. It is high in calcium, potassium, and vitamins A (which helps prevent night blindness) and C. Also, it is rich in dietary fiber and has small amounts of iron. Sweet potatoes are a healthier alternative to white potatoes, which have a high glycemic index. This means that starch from a white potato is quickly metabolized, leading to a rapid increase in blood sugar. Sweet potato starches are metabolized at a slower rate.

Varieties

There are several sweet potato varieties suitable for growing in Georgia.

Beauregard ? This variety is found quite often in garden centers. It shows some disease resistance and produces a high yield. It has a light rose skin and a deep orange flesh. It matures in 105 days.

Centennial - Tolerates clay soil, is disease resistant and matures in 90 days.

Jewel - Produces a high yield and bakes well. Matures in 120 days.

Sweet potato slips. Photo by Malgorzata Florkowska

Porto Rico - Matures in 110 days. This is an old "bunch" variety that creates compact vines with big yields. It bakes well.

Yellow Jersey - An old fashioned potato with yellow skin and white flesh. Matures in 100 days.

Soil Preparation, Culture and Fertilization

Sweet potatoes are warm-weather plants. The soil temperature should reach 70°F before they can be planted in the garden. This can occur in mid-April in south Georgia and the first part of May in the mid- to northern part of the state. They prefer a well-drained loamy to sandy soil that receives eight to 10 hours of sunlight per day. If your soil contains clay, add some aged compost or other organic amendment to the planting bed to improve drainage. Sweet potatoes grown in unamended clay soils are usually small.

Sweet potatoes are produced from plants called “slips,” which are small rooted pieces of tuberous root. Slips are produced from the roots of the previous season?s crop. Most gardeners prefer to plant slips bought from garden centers because they are most likely to be disease resistant and because sweet potato seeds can be difficult to obtain and get started.

Space the slips 3 feet apart to allow room for the vines to expand. Sweet potatoes do best in a slightly acidic soil with a pH range of 6.0-6.5. Be careful with fertilization. Over-fertilized sweet potato plants produce just foliage. Base the fertilizer application on the results of a soil test. In the absence of a soil test, apply 5-10-10 fertilizer at 30 pounds per 1,000 square feet. Next, sidedress 4 pounds of 5-10-10 per 100 feet of row just before the vines cover the row. Water the plants thoroughly during the late evening or in the early morning to allow the leaves to dry off during the day. Sweet potatoes need at least 1 inch of water per week to grow well. Watering is especially important during the transplant, establishment and root development period. Stop watering the sweet potatoes three to four weeks before harvest to prevent tubers from splitting. Control weeds, especially before the plants cover the row.

Harvest, Storage and Use

Sweet potatoes should be ready to harvest in about 90-120 days after planting. The tops will begin to die back as it gets close to harvest time. They should be harvested before the first frost. Cool soil reduces their quality and storage life. Sweet potato skin is very thin, so freshly dug roots need to be handled gently. After harvest, air dry sweet potatoes for several days in a shady location at temperatures of 80-85°F. Next, move the potatoes to a final storage area, such as your kitchen, where temperatures do not fall below 55°F. At this temperature, potatoes can be stored for up to 6 months. Check them for decay frequently and remove any affected potatoes so the decay will not spread.

Sweet potatoes after harvest.
Photo by Robert Westerfield

Sweet potatoes can be grilled, baked, cooked or microwaved whole and make a healthy substitute for white potatoes. Candied sweet potato is a popular fall side dish made of sweet potatoes, brown sugar, orange juice, marshmallows and maple syrup. Sweet potatoes can also be made into a casserole and baked with a brown sugar and pecan toping. Even sweet potato fries have become popular.

Sweet Potato Facts from NC Cooperative Extension

There is a lot of confusion surrounding those orange-fleshed roots. Most of it stems from an advertising campaign many, many years ago to distinguish orange-fleshed and white-fleshed sweet potatoes. First off, sweet potatoes are not potatoes at all. A potato is a tuber – meaning if you were to cut it into many pieces (all containing an eye) they would all form plants. A sweet potato is a swollen root – if you cut it into many pieces, only certain pieces will grow. Sweet potatoes are actually more closely related to morning glories (they’re basically sisters!). So if a sweet potato is not a potato, is it a yam? NO! Sweet potatoes are native to Central and South America and are commonly grown in the United States. Yams are a starchy tuber native to Africa and Asia. Yams have a rough, scaly skin and often have unusual shapes. If you see one and say, “That can’t be a yam!” then it probably is. (*continued next page*)

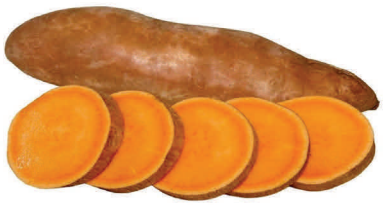
Sweet Potato or Yam Facts continued

We don't often see yams offered in grocery stores, except sometimes in ethnic markets. Yams are not grown in the United States; any yams found here will be imported from the Caribbean. In an attempt to clear up this confusion, the United States Department of Agriculture has mandated that all sweet potato "yams" be labeled also with "sweet potato". North Carolina is the number one producer of sweet potatoes in the nation. In our state we produce over 40% of the nation's supply. Louisiana is the other leading producer. Sweet potato flesh can be light yellow to pink, red, or orange and the skin can be yellow to purple to orange. In North Carolina, farmers typically grow 'Jewel' or 'Beauregard', both orange-fleshed cultivars. North Carolina sweet potatoes are available year-round, but are most abundant September through June. When selecting sweet potatoes, choose firm, evenly-shaped roots that do not show signs of decay. Never put sweet potatoes in the refrigerator or store under 50 F. The cold temperatures can result in off flavors and even decay. Instead, store them in a cool, dry, well-ventilated area around 55 F (like your garage).

Read more at: https://lee.ces.ncsu.edu/2010/11/sweet-potatoes-or-yams/

Recipe Corner

Skillet Sweet Potatoes



Serves: 4

3 medium sweet potatoes
2 cloves garlic, minced
1 tbsp canola Oil*
1 tsp. sea salt
2 tbsp. parsley
½ tsp. ground cinnamon

Peel and cube your sweet potatoes. Add canola oil to your skillet and bring to medium heat. Add sweet potatoes and cook for about 10-15 minutes. Add salt, parsley, ground cinnamon, and garlic. cook for about four more minutes or until completely done.
Nutrition: 120 Calories, 20 g carbs, 3.5 g fat, 2 g protein
* = modification
Recipe source: http://www.yummly.com/recipe/Skillet-Sweet-Potatoes-1440543

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