Guilford County Extension Community Garden Outreach, News, and Information

Garden Wise

August 2014

Garden Wise

Another spring has come and gone. With it, we hope, came a beautiful bounty of fruits and vegetables. Right after the whirlwind game of pest vs. gardener I am able to reflect on what I have managed to create with the help of this wonderful, yet sometimes trying, North Carolina environment. At this time in the gardening season I think of all of the preparation and work I put into my garden, and it quickly reminds me of how much more I could do with my space if I extended my growing season. This can be done by learning more about cool weather and winter gardening. Lucky for us and our community there are some wonderful classes that are bound to teach you some valuable information about gardening. The "Growing the Green Way" series of classes are starting up and there are gardening classes offered at High Point library, as well. The dates and times are located in the next section of the newsletter. Remember these classes are starting up this August so sign up ASAP! Don't miss out on these great classes and spread the word. (Signup is important so we'll know how many attendees to anticipate.)

"O Earth, that hast no voice, confide to me a voice!

O harvest of my lands! O boundless summer growths!

O lavish, brown, parturient earth! O infinite, teeming womb!

A verse to seek, to see, to narrate thee."

- Walt Whitman

Happy Gardening,
-EMGV Eva Preiser

Interested in becoming an Extension Master Gardener Volunteer?

We're accepting applications for the 2015 EMGV training program until October 30, but because space will be limited in 2015, with class size restricted to 25 members, we urge you to apply as soon as possible if you're interested. The EMGV program provides broad horticultural training, **not** so you can become a better gardener for your *own* sake, but so you can become a *VOLUNTEER EDUCATOR who helps the public answer their gardening questions.* There are specific volunteer requirements both for trainees and for veteran members . . . but there's also more fun and friendship than you can imagine!

Want more info? Contact Cooperative Extension at 641-2400 and ask for a brochure and application.

Extension Master Gardener
NC COOPERATIVE EXTENSION

2014 Growing the Green Way
Fall Class Series

CLASSES ARE FREE, BUT PRE-REGISTRATION IS REQUESTED:

Call or email Pam Marshall at 375-5876 or pamela_marshall@ncsu.edu and sign up for your choice of workshop and location.

Class Locations:

- Cooperative Extension Office, 3309 Burlington Road, Greensboro, NC 27405
- Bur-Mil Park (Wildlife Education Center), 5834 Bur-Mil Club Road, Greensboro 27410
- Greensboro Arboretum (Ed Center), 401 Ashland Drive, Greensboro 27403
- Kathleen Clay Edwards Library, 1420 Price Park Road, Greensboro, NC 27410

FALL VEGETABLE GARDENING: EXTENDING THE HARVEST

Vegetable gardening for the year does not have to end when the tomatoes and cucumbers do! This workshop will focus on strategies and timing to maximize yields and extend the harvest from your vegetable garden by growing fall and winter crops. We'll talk about season extenders and other tips and techniques to keep your garden producing well past the first frost.

Sunday, Aug. 17th	4:00 pm	Greensboro Arboretum
Tuesday, Aug. 19th	6:30 pm	Cooperative Extension
Thursday, Aug. 21st	6:30 pm	Bur-Mil Wildlife Education Center
Monday, Aug. 25th	6:30 pm	Kathleen Clay Edwards Library

SUSTAINABLE LAWN CARE – A GREENER YARD

Fall is the best time for rejuvenating lawns - and also to discuss how knowing and using good growing practices all year saves you time and money and reduces environmental impact. Establishing a healthy stand of grass with good planning and careful management can minimize issues with weeds, diseases and insects. You can have a healthy lawn and still reduce the impact and expense of lawn chemicals.

Thursday, Sept. 4th	6:30 pm	Bur-Mil Wildlife Education Center
Sunday, Sept. 7th	4:00 pm	Greensboro Arboretum
Tuesday, Sept. 9th	6:30 pm	Cooperative Extension
Monday, Sept. 15th	6:30 pm	Kathleen Clay Edwards Library

GARDENING INDOORS: SUCCESS WITH HOUSEPLANTS

Does your indoor foliage collection look like an episode of "Desperate Houseplants"? Sometimes meeting their needs in that environment can feel a little challenging. Success with houseplants is not luck, or a gift someone is born with - just a little bit of information makes it easy and fun. The key is making the right selections, and learning the simple steps to keep them thriving.

Tuesday, Sept. 23rd	6:30 pm	Cooperative Extension
Thursday, Sept. 25th	6:30 pm	Bur-Mil Wildlife Education Center
Sunday, Sept. 28th	4:00 pm	Greensboro Arboretum
Wednesday, Oct. 8th	6:30 pm	Kathleen Clay Edwards Library

More on the next page!

2014 Growing the Green Way
Fall Class Series

FLOWERING TREES AND SHRUBS

Learn how to extend the bloom-time in your yard by making the most of flowering trees and shrubs. "Fall is for Planting!" - so now is the time to talk about how to select, install, and maintain these special plants. We will also discuss which ones do especially well in our Piedmont area gardens, so please join us in appreciating the many wonders of flowering trees and shrubs.

Thursday, Oct. 9th	6:30 pm	Bur-Mil Wildlife Education Center
Sunday, Oct. 12th	4:00 pm	Greensboro Arboretum
Tuesday, Oct. 14th	6:30 pm	Cooperative Extension
Monday, Oct. 27th	6:30 pm	Kathleen Clay Edwards Library

COMPOSTING AND VERMICOMPOSTING

What to do with all those leaves?! Composting is a great way to recycle, and it also produces a fantastic organic amendment that improves the fertility and texture of your soil and helps everything grow better. We will discuss easy ways to start composting in your own backyard, and what should or shouldn't be composted. We'll also go over the to-do list for having a successful "worm bin" at home.

Sunday, Oct. 19th	4:00 pm	Greensboro Arboretum
Thursday, Oct. 23rd	6:30 pm	Bur-Mil Wildlife Education Center
Tuesday, Oct. 28th	6:30 pm	Cooperative Extension
Monday, Nov. 3rd	6:30 pm	Kathleen Clay Edwards Library

PRESENTED BY:

NC COOPERATIVE EXTENSION SERVICE IN GUILFORD COUNTY and THE EXTENSION MASTER GARDENER VOLUNTEERS

SPONSORED BY:

GREENSBORO PARKS & RECREATION DEPARTMENT and GREENSBORO BEAUTIFUL, INC.

SHARE THE HARVEST

As you garden this year, please remember to Share the Harvest. We have a collection site at the Ag Center, or you can go to http://www.sharetheharvestguilfordcounty.org/ to find a drop-off spot near you and your garden. The Triad still has roughly one in five people who need food, and you can help!

2014 Fall Gardening Classes

High Point Public Library

Presented by Extension Master Gardener Volunteers

- One gardening class will be offered each month through the fall growing season; each class will be offered twice in the month
- All classes will be in the Morgan Room except Sat. 9/13 will be in the Story Room

Class Location

High Point Public Library

901 North Main Street
High Point, NC
(336) 883-3660

QUESTIONS?

Call Pam Marshall at 641-2400
or by email at
pamela_marshall@ncsu.edu

Classes are free and no pre-registration required

FALL VEGETABLE GARDENING: EXTENDING YOUR HARVEST

Saturday, August 16th 1:00 - 2:30 pm (Morgan Room)
Wednesday, August 20th 6:00 - 7:30 pm (Morgan Room)

Vegetable gardening for the year does not have to end when the tomatoes and cucumbers do! This workshop will focus on strategies and timing to maximize yields and extend the harvest from your vegetable garden by growing fall and winter crops. We'll talk about season extenders and other tips and techniques to keep your garden producing well past the first frost.

SUSTAINABLE LAWN CARE - A GREENER YARD

Saturday, September 13th 1:00 - 2:30 pm (Story Room)
Wednesday, September 17th 6:00 - 7:30 pm (Morgan Room)

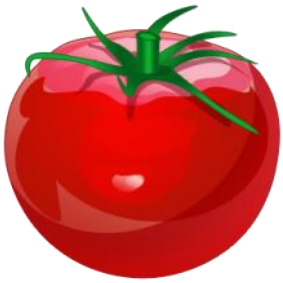
Fall is the best time for rejuvenating lawns - and also to discuss how knowing and using good growing practices all year saves you time and money and reduces environmental impact. Establishing a healthy stand of grass with good planning and careful management can minimize issues with weeds, diseases and insects. You can have a healthy lawn and still reduce the impact and expense of lawn chemicals.

COMPOSTING AND VERMICOMPOSTING - RECYCLING WITH NATURE

Saturday, October 18th 1:00 - 2:30 pm (Morgan Room)
Wednesday, October 29th 6:00 - 7:30 pm (Morgan Room)

What to do with all those leaves?! Composting is a great way to recycle, and it also produces a fantastic organic amendment that improves the fertility and texture of your soil and helps everything grow better. We will discuss easy ways to start composting in your own backyard, and what should or shouldn't be composted. We'll also go over the to-do list for having a successful "worm bin" at home.

Blight, Oh Blight!



What we all visualize when we plant tomatoes in the springtime.

The first thing to do when you believe your plants have "blight" is to determine what type of blight is affecting your plants. There are several types of blight: fire blight, late blight, and early blight. These types depend what part of the plant is being affected and at what time in the growing season the disease occurs. Sign up at the http://usablight.org/ website for blight updates in your particular community. For most home gardeners, we are concerned with early and late blight. (Fire blight, which has also been seen frequently this year, affects fruits crops such as pears and apples.) For our immediate usage I will discus the 2 most prominent forms confronting the vegetable gardener: early and late blight.

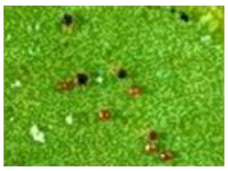
Early Blight: This form affects the foliage of the plants, and for us in our climate our tomato plants are extremely prone to this disease. It can be spread from plants bought at nurseries, so be wary of your suppliers. This is a fungal disease caused by the Alternaria solani pathogen. This fungus is spread by infected soil (containing fungal spores) getting on the lower leaves of the plants. This happens when there is heavy rain or when watering your garden. The disease is described as small black-brown spots on yellowing leaves. The disease will spread up the plant if not managed. This fungus thrives in 80°+ weather. Tips in managing this fungus are: plant clean seed, plant your own transplants, do not save seeds from plants with early blight, mulch around the base of the plant with straw or newspaper, rotate all solanaceous crops every growing season, and use drip irrigation if possible. Fungicidal sprays will *not* get rid of the disease, so prevention is best to maintain healthy plants and control the fungus. (We'll talk more in this issue about garden cleanliness and its role in disease prevention and control.)

Late Blight: This form can affect the foliage and the fruit of potatoes, tomatoes, petunias, and nightshades. Phytophthora infestans is the oomycete pathogen that we term Late Blight. This blight in particular caused the great potato famine in Ireland, reeking havoc on the country. It is usually first seen on the canopy foliage of the plant causing them to become irregularly shaped and showing the typical dark watermark spot. The leaves will become curled and die as the fungal disease spreads. The fruit on tomatoes can also be affected and will show the same dark watermark that will spread over the whole fruit. The spores of this fungus can be seen on the underside of the leaves and is described as white and powdery. Tips for handling this disease include; planting early in the season to avoid prime fungal weather, do not over water, remove all infected leaves and fruit, clean all gardening tools, organic options to handle the fungus and it spreading is an OMRI fixed copper formulation.

When reality strikes:

Spider Mites

Southern Red Mite



Spruce Spider Mite

Two Spotted Mite

Three species of spider mites are found in our area:

Southern red mite, *Oligonychus ilicis* (McGregor), Tetranychidae, typically dark red in cool weather

Spruce spider mite, *Oligonychus ununguis* (Jacobi), Tetranychidae, typically dark brown or black

Two spotted mite, *Tetranychus urticae* Koch, Tetratnychidae, typically greenish or yellowish with 2 or sometimes 4 spots.

These mites are 8-legged creatures more similar to spiders than insects. They may create whitish webbing, leading to the name. Often found on the underside of leaves or needles, they feed by puncturing the leaf or needle and sucking the sap. This creates a spot, often yellow, and a hole in the needle or leaf which may die. In a heavy infestation, damage to the plant or tree can be severe, even fatal. Spruce spider mites are a particular hazard to commercial Fraser fir Christmas tree growers in western North Carolina. They also feed on other conifers. Southern Red Mites are more frequent on azaleas, hollies and camellias although they also attack many plants, shrubs and trees. Two-spotted mites attack crops, landscape and green-house plants including roses, day lilies, marigolds and hollyhocks and are said to be the damaging insect pest found on the most species in the southeast.

Life cycle

Spruce and Southern red mites are considered a cool season mite. The adults die off in hot weather, partly due to predaceous mites, and in very cold winters. Only the tiny round, red to brown eggs survives. When temperatures rise, these mites can reproduce very rapidly. Overwintering eggs hatch in spring, or in April and May in cooler climates. The larvae are about the size of the tiny egg and have only 6 legs. Two nymph stages with 8 legs follow. As soon as the adult female emerges from the last nymph molt, she mates and lays eggs. The cycle can be as short as two weeks between hatching and reproduction. Most damage due to these mites occurs spring and fall, making this a time to begin monitoring for mite infestation. The two spotted mite life cycle is different: the adults overwinter in the ground, emerging as spring temperatures rise. They reproduce rapidly with warm and hot temperatures.

Mite eggs are laid on the bottom of leaves or at the base of conifer needles, often toward the interior of the tree. The eggs require a magnifying lens or microscope for detection. One way to check for mites is to shake a branch over white paper or cardboard—a paper plate for example—and look for small moving things about the size of a period. The eggs are smaller still, and have a hairlike protrusion [stripe] from the top.

What to do to control spider mites:

There are several possible insecticide listed in the table in this publication http://www.ces.ncsu.edu/depts/ent/notes/O&T/trees/ort077e/ort077e.htm

Because mites feed on the undersides of leaves, spraying must cover these areas. Repeat application in 10-14 days may be may be necessary to kill mites that have hatched since the first treatment

References

http://www.ces.ncsu.edu/depts/ent/notes/O&T/flowers/note25/note25.html
http://fsg.ces.ncsu.edu/publication/spruce-spider-mite-oligonychus-ununguis/
http://www.ces.ncsu.edu/depts/ent/notes/O&T/trees/ort077e/ort077e.htm

The What, Why, and How of Turnips

The turnip is a root vegetable that grows in temperate climates around the world for its white, bulblike taproot. Large varieties are grown for feed for livestock but the smaller varieties are grown for food. They are part of the Brassicaceae family, which includes cabbage, kale, brussels-sprouts, and others. Turnips have a rosette of bright green leaves growing from the bulb-like root. A number of reasons make the turnip an excellent choice for the vegetable gardener.

First, it is easy to grow and keeps well. It is a favorite in northern Europe and Great Britain as well as a variety of cuisines across Asia.

Second, while the roots are nutritious, it is its top fresh greens that are even more nutritious. Specifically the root is very low in calories (28 per 100 g.) but a rich in anti-oxidants, minerals, vitamins, and dietary fiber. The greens have twice as much or more of vitamin C, A, K; calcium, iron, and manganese.

Growing turnips is not complicated. Fast-growing turnips like cool temperatures. Hot weather makes the leaves tough and the roots woody and bitter. Since they are a cool weather vegetable best harvested before temperatures get over 75 degrees, sow seeds directly in a well-drained soil rich in organic matter 1/2 inch deep and 1 inch apart in wide rows.

Sow 2 to 3 weeks before the average last frost date for a spring harvest. Keep the soil moist to keep the plants growing as fast as possible in order to harvest before the weather gets too hot. Thin turnips grown for greens 2 to 3 inches apart. Thin turnips grown for the root farther apart. Mulch with straw to protect the root tops from the sun. To encourage fast growth, side dress the plants with compost.

Turnips may be harvested 30 to 60 days after sowing. Gather the roots when they are 2 to 3 inches in diameter. Leaves can be cut when they are Turnip greens keep in the refrigerator for around 7 days; however, the roots will keep for 2 months in the refrigerator or a root cellar for 4 to 5 months.

Recipes for cooking turnips range from caramelized, fried, mashed, and roasted. Cooking the leaves is similar to other cooked greens. Here, from **Real Simple** magazine, are some quick and easy recipes:

Sautéed Turnips and Greens

Cook peeled and cut-up turnips and sliced garlic in olive oil in a large skillet until tender. Add the turnip greens and cook until just wilted. Season with salt and pepper and a squeeze of lemon juice.

Roasted Turnips With Ginger

Peel and cut turnips into wedges. Toss with sliced fresh ginger, canola oil, salt, and pepper on a rimmed baking sheet. Drizzle with honey and roast at 400° F until tender.

Mashed Turnips With Crispy Bacon

Simmer peeled and cut-up turnips in boiling salted water until tender. Drain and mash with butter, salt, and pepper. Fold in crumbled cooked bacon and chopped chives; top with shaved Parmesan.

Kids Corner

Peter Rabbit made his first appearance in 1902 in **The Tale of Peter Rabbit** written by Beatrix Potter. Peter was named after a pet rabbit Beatrix Potter had as a child called Peter Piper. Those who remember the story will recall Peter disobeys his mother's orders and sneaks into Mr. McGregor's garden, eating as many vegetables as he can before Mr. McGregor spots him and chases him about.

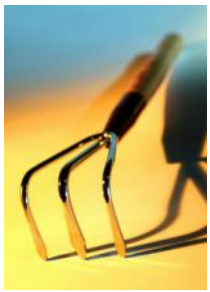
After reading the story so many times to my daughter, we can only plant French breakfast radishes because that's what Peter Rabbit ate. There was, however, salvias, catmints, thymes, chamomiles, chives, parsley, nasturtiums, basil, pansies, scented geraniums, and other perennial flowers; all things that will do beautifully in gardens here in the piedmont.

The wide diversity of plants mentioned in Beatrix Potter's tales, ranging from vegetables, herbs, and flowers to fruits and woody ornamentals, allows for many interpretations of the Peter Rabbit theme. A cottage garden of mixed herbs, flowers, and vegetables delightfully achieves the notion. Of course, you will need to include a scarecrow dressed in a little blue coat, felt slipper and a tam-o-shanter (hat) like that which Peter loses after being chased away by Mr. McGregor.

Why not let the novel inspire you to build a garden for the youth in your community? Or you could create a school garden that allows the kids to experience the wonderful plants that Peter gets into: quick-growing radishes, lettuce, carrots, and peas that grow up on trellises.

Of course, most of us hope Peter doesn't slip under the garden gate to munch on the greens or sleep under the sage.

End-of-Season Clean-Up Gets Garden Ready for Next Year



By Patricia Lunn Adsit, Guilford County EMGV
Adapted by Linda Brandon, Guilford County EMGV

Dr. Stephen Covey, in his classic ***7 Habits of Highly Effective People***, suggested that the path to success incorporated the habit of *beginning with the end in mind*. It's the time of the year for gardeners to shake that advice up a bit and *end* with the *beginning* in mind.

As you review your 2014 garden experience, take a moment to relish all the things that went right for you this year. Now, while you are in a positive frame of mind, make a mental checklist of the things that went awry…things you want to change for next year. If "reduce the number of diseases and pest problems" was high on that second list, the end of one season is the time to begin to prepare your garden for a successful year ahead.

continued

Here in the Zone 7B/Upper Piedmont of NC, we will have our first frost in about 2 months, so our end-of-season garden clean-up can wait just a while longer. When summer annuals and seasonal vegetables turn brown and begin to die back, it's time to clean up your garden this year. Use the following four recommendations to guide your activities:

1. Remove spent plant materials

Many of the bacteria, fungi, and other disease-causing organisms that are the sources of those spots on and blights of your plants survive over the winter, or "overwinter," in the dead leaves, stems, roots, over-ripe or mummified fruits, spent blooms, and other plant parts that get left behind in the garden at the end of the growing season. When temperatures begin to warm up again next spring, those same pathogens that troubled your garden this year will come out of their dormant state and pounce on tender plants. Examples of some garden diseases that can overwinter include scab on apples, leaf spot on strawberries, black rot of grapes, leaf blotch of peonies, black spot on roses, and many problems of tomatoes and their plant relatives, including early blight, late blight, fusarium wilt, verticillium wilt, and bacterial wilt .

What do I do with these spent plant materials?

According to the Iowa State Extension:

"A common question asked by gardeners is whether diseased plants can be safely composted. The answer is most often, no. If your compost pile reaches temperatures (of)… 140° F, most of the disease organisms should be killed. (A temperature probe can be used to monitor compost pile temperatures.) If you are not sure if your compost pile is reaching these high temperatures, it is a good idea to discard the material by properly bagging it or by burning if this is allowed in your area (check local laws)."

Since the interior temperatures of many home compost piles do not reach 140°F, err on the safe side and put end-of-season spent plant material, including roots, where they cannot be recycled into the garden. Remember that organisms can survive in weeds as well as plant debris, so any growth surrounding your garden plants should be removed, too.

Diseases are not the only garden pests that survive through the winter on spent plant material. Many insects use debris as a safe harbor for larvae. Think: European corn borer, squash vine borer, Mexican bean beetle, squash bug, tomato hornworm, cabbage looper, and imported cabbageworm, just to name a few. Flea beetles and spider mites can find food and winter shelter in spent plant material and weeds. Removing the spent plant material from the garden or tilling them into the soil destroys the hiding places for the insects.

2. Turn over the soil

Now is a good time to turn the soil, tilling gardening areas to break debris into smaller pieces and then working them into the soil. Plant material decomposes more rapidly when buried than when left on the soil surface.

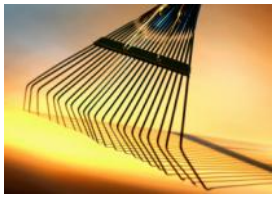
For some pests and pathogens, turning over the soil after removing spent plant materials is recommended as the main line of defense against overpopulation next year. Consider this information from "Home and Horticultural Pests: Squash Bugs and Squash Vine Borers," from Kansas State University, "A vigorous autumn… rototilling can physically destroy cocoons and larvae (of the squash vine borer). Brought to the surface, cocoons and larvae are more susceptible to predation by birds and exposed to cold winter elements, leading to their demise.

continued

Deep plowing physically destroys cocoons and larvae burying them deep beneath the soil surface so pupated moths become entombed underground."

Turning over the soil at the end of the gardening season is the ideal time to improve your soil by adding lime (as indicated by your soil test) and by incorporating organic materials (such as compost or finely-shredded leaves). Compost is an excellent soil-builder, containing highly nutritious, decomposed plant material and beneficial organisms, and needs the winter months to add those valuable nutrients to the soil. Remember, there's no need to *finely* till your garden in Fall. Save that chore for spring.

This is also an ideal time for planting a cover crop to maintain and rejuvenate the soil. If you don't plant a cover crop, mulch any empty garden beds with shredded leaves or grass cuttings to help prevent erosion, discourage weed germination, and encourage earthworm activity.



3. Clean garden tools and plant supports before storing

Before storing for the winter, clean all garden tools and plant supports in order to remove any spent plant materials and to protect your investment. Rinse off excess soil with a garden hose, then scrub surfaces with disinfectant, such as a 10% bleach solution. Allow tools to air-dry before storing. Coat metal tools with a thin sheen of oil to prevent rust. Store tools for winter inside a shed or garage. Follow manufacturer's instructions when winterizing power tools.

4. Keep good records for crop rotation

A garden journal is another weapon in your arsenal to prevent plant pests and pathogens: taking good notes *now* of what grew where in the garden this year will aid you in planning your garden's crop rotation for next year. Crop rotation, in addition to the other three recommendations, further reduces the chances next year's plants will run into this year's overwintered pathogens. *A rotation cycle of 4 years is best to minimize disease, but even a two- or three-year rotation will provide a benefit.*

By following these end-of-the-season recommendations, you will be ready to begin planning your next year's garden, with the knowledge that you will be getting a boost to beginning a successful season. After all, January 1st is just a few months away, and ***the NC Planting Guide*** says we can begin planting garden peas then!

Resources:

The 7 Habits of Highly Effective People®
https://www.stephencovey.com/7habits/7habits.php
From North Carolina Extension –
Autumn Garden Cleanup Will Pay Off in Spring
http://wayne.ces.ncsu.edu/2012/11/autumn-garden-cleanup-will-pay-off-in-spring/
Fall Preparation for Next Year's Garden:
http://extensiongardener.ces.ncsu.edu/spotlight/fall-preparation-for-next-years-garden/
Vegetable Gardening - Planting Guide
http://www.ces.ncsu.edu/depts/hort/hil/pdf/hil-8103.pdf
From Iowa State Extension –
Time to Tidy Up Garden Beds:
http://www.extension.iastate.edu/obrien/sites/www.extension.iastate.edu/files/obrien/October%208%20Fall%20Clean-up.pdf
From Kansas State –
Squash Bugs and Squash Vine Borers:
http://www.ksre.ksu.edu/bookstore/pubs/mf2508.pdf
From the University of Tennessee Extension –
Winterizing Your Garden:https://utextension.tennessee.edu/washington/Documents/Winter

Community Garden Updates

Guilford College UMC

Our small raised bed garden at Guilford College UMC is doing very nice. Lots of squash, beans and eggplant. Some Mexican bean beetle damage earlier but I applied controls. Tomatoes (mostly *Celebrity)* provided the first harvest by July 4th. The bush beans came up fine from the beans received from last community garden meeting-and they're stringless- thanks! Most all produce we've taken to Share the Harvest.

The raised bed garden at Guilford Middle School performing decent -some plots have been neglected. Harvested the first sweet corn end of June. Plenty of green *Better Boys* going into 2nd week of July. Deer ate the cucumbers I had planned to train on trellis and enjoyed some of the pole beans. Glad we got some rain 2nd week July.

-George Bowen

Our Faith Community Garden

Our faith community garden is flourishing well and has provided 1 meal of lettuce salad for 50 people on our community night dinner and one spinach - strawberry (the strawberries came from the local Farmer's Market) salad for another night we host a community dinner . We put up 12 pints of canned beans for our food pantry. And will be hopefully canning tomatoes soon. We thank The Lord for His bountiful harvest. God is Good! Life on Lexington Faith Community Garden.

-Jan Kretlow

Centennial Garden

The Centennial Garden has expanded this year. Three new raised beds have been added to the site. White potatoes was planted in one, sweet potatoes in the other and herbs in the third bed. Compost for the beds was donated by the City of Greensboro. The regular garden is in a transitional period at this time. We are going from the summer vegetables to planning on the fall planting. Public Health staff has harvested and donated 410 of produce to “Share the Harvest”. The produce has consisted of; asparagus, squash, zucchini, corn, water melons, peppers, egg plants, herbs and cabbage.

As the summer plants are being removed, Public Health staff have planted in its place, butternut squash and patty pan squash. We plan to also plant cabbage, collard, beets and turnips for the fall.

-Ken Carter

St. Francis Community Garden

Deer, Rabbit, have been a major problem at St Francis Community Garden, eating everything in sight.

-C. Philip Weathersbee

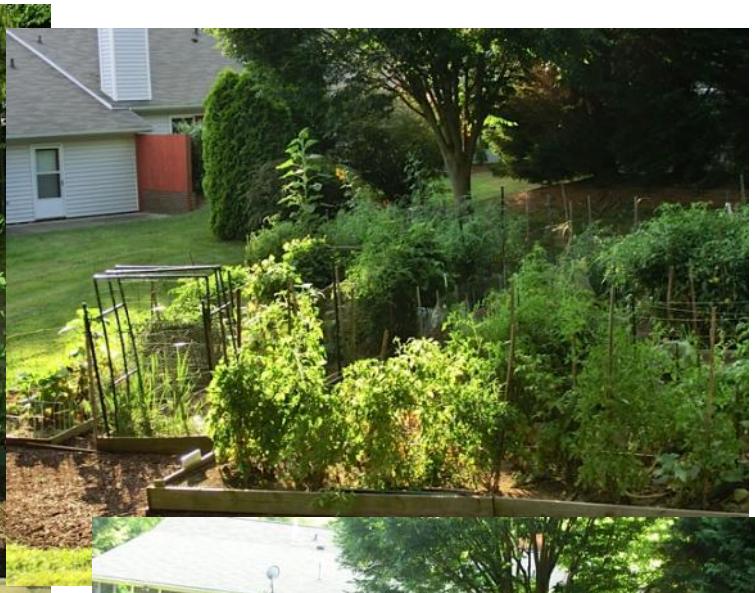
Starmount Garden

The Starmount Presbyterian Church Garden is thriving this year thanks to abundant rain, sun and cheerful volunteers tilling the soil. Squash, cucumbers, and tomatoes have been our big crops to date with 98% of our harvest being donated to Share the Harvest.

Consider Share the Harvest when you have excess produce. From the walk-in cooler at the Interactive Resource Center donated produce is distributed to agencies that either have a food pantry or prepare a meal for the hungry.

Brandy Wine Community Garden

We have a handful of new gardeners this year but most of our 14 plots are tended by veterans. We've had good success with zucchini, potatoes and small tomatoes this summer. We've been able to share produce with our direct neighbors as well as a local food pantry. Most of us will be planting our Fall gardens soon and hope that we'll have a milder winter so our collards will keep producing!



Crop Rotation for the Small Garden

By Carol Hancock, EMGV

Small backyard vegetable gardens can be susceptible to the same plant diseases and insects that plague bigger farms. The use of chemical controls for these problems might be undesirable or unavailable in the home setting. The age-old practice of crop rotation is one way to prevent or lessen some of these problems, even in a small garden. Crop rotation means changing the crop each year on the same piece of ground.

Home gardeners tend to plant what they like and find easy to grow. This tendency leads to cultivating the same crops on the same areas of land year after year. Growing vegetables from the same botanical family or vegetables that have the same nutritional requirements in one garden area more often that once every three years may lead to a decline in soil fertility and higher incidence of certain insect pests and disease problems. Soil born disease organisms can remain in the soil for long periods of time and some of these tend to attack vegetables from the same botanic families.

Three Reasons to Rotate Vegetable Crops:

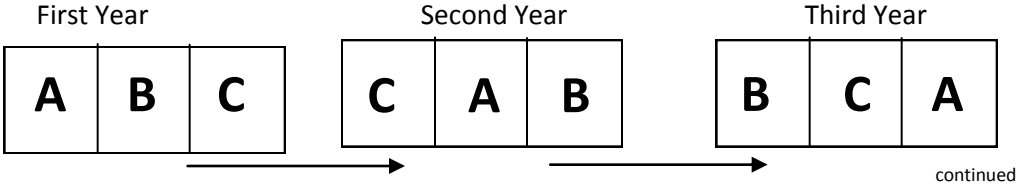
1. Reduction of harmful insects and plant diseases by rotating the location of plants from the same families on a piece of ground.
2. Better plant nutrition by rotating location of plants that make the same nutritional demands on the soil on a piece of ground.
3. Improvement of soil structure by rotating plants that have roots at various depths and that are cultivated with different techniques.

Common Vegetable Families:

Although the parts of vegetables that we eat (roots, leaves, stems, etc.) may be different, botanically the plants may belong to the same family.

- **S**unflower family lettuces, sunflowers
- **G**oosefoot family beets, spinach, chard, quinoa
- **M**ustard family mustard greens, rutabaga, kale, broccoli, cabbage
- cauliflower, turnip, radish, watercress
- **O**nion family garlic, shallots, leeks, onions, chives
- **G**ourd family melons, squashes, gourds
- **P**ea family peas, beans, jicama,peanuts
- **N**ightshade family peppers, tomatoes, eggplant, potato
- **C**arrot family celery,dill,chervil,fennel,carrot,parsnip,parsley
- **G**rass family corn

It is ideal to allow three years between the planting of same families in the same garden area. Here is a simple example for a three-year rotation in a small garden. A family likes to plant (A) tomatoes, (B) beans and (C) squash. The garden is divided up into three parts. The following diagram illustrates the rotation for the recommended three-year rotation. Year four would return to the first year plan.



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The above example of crop rotation is a very simple one. Many home gardeners with limited space like to grow more than three crops. The arrangement of crops depends on many factors such as size and shape of beds, climate and soil in growing areas and number of crops to be grown. The planning process can seem complicated when juggling numerous plants in a limited space. A hand drawn diagram of the garden spaces available and vegetable named index cards to be laid in the appropriate spaces to be planted can be useful. A written record of each year's rotation is essential to keeping track of the plan.

In small home gardens, other crop rotation options may be considered. If space is very limited the gardener may choose to grow only beans and their family members in year one, only tomatoes and their family members in year two and only squash family members in year three. Another option, if space allowed, would be to move the entire garden plot to another garden area each year. The plot that is now vacant would benefit from a planting of some soil amending cover crop (green manure) such as annual rye, crimson clover or buckwheat. This is a great way to improve the soil prior to the return to vegetable cultivation.

Experimenting with crop rotation in the small garden may lead to healthier and more productive vegetable crops. Such a practice that contributes to reliability and sustainability can become a valuable part of gardening technique.

Resources

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