

September 2013

# Roots and Shoots



Volume 29, Issue 9



## Mark Evans to speak at September general meeting



By Susan Lovell

Please join us at our general meeting on Tuesday, September 24 at 6:30 p.m. Our guest speaker will be Mark Evans, Putnam County Extension Educator. He will be discussing *Cover Crops for Home Gardeners*. He personally uses no-till, cover crops, and fabric in his own garden to build soil quality and control weeds.

The second part of our scheduled program has been postponed. Heather Reynolds, IU Associate Professor of Biology, will be re-scheduled in 2014.

The refreshment committee will have snacks and drinks available starting at 6:00 p.m. September committee members are Mary Hawkins, Karen King, Marilyn Brinley, Tom Lovell, Marilyn Bourke, and Ivy McCammon.

It's a good idea to get your membership renewals completed in September. The renewal form has been revised and is on our webpage. Please renew your membership early as the information will appear in the 2014 membership booklet, *folia & flora*. The booklet will be distributed at our January general meeting.

September is also time to gear-up committees including program planning. Sign-up sheets for those interested in sharing their ideas for topics and presenters will be available. This committee will meet in October on a date to be determined.

Last but certainly not least, a big "thank you" to our refreshment committee for our Demo Garden clean up night on July 23. July refreshment committee members included Bethany Murray, Susan Sachtjen, Mary Hoffmann, Di Dingman, Dorothea Cole-Kiser, and Sandy Belth. Snacks were delicious and plentiful!

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## Special points of interest:

- *Monroe County Master Gardeners are on Facebook*
- *Volunteer spotlight shines on Marilyn Bourke*
- *Many trees and shrubs thrive when planted in fall*
- *Front yard gardening presents a challenge*
- *Volunteer at Hilltop gardens and enjoy fall gardening*

## Member news

By Evelyn Harrell



There is still time to get your hours recorded for your past year's volunteer activities. September 15 is the deadline to get those numbers loaded into the website so that Amy can forward them to Purdue. It is our chance to document the level of volunteerism and education being demonstrated here in Monroe County. Please don't worry too much over whether a potential entry will qualify for volunteer hours given or education hours earned. Amy will look at each record and will make a decision if something is unusual.

### **Master Gardeners at the Indiana State Fair**

Monroe County Master Gardeners were asked to staff the Purdue Master Gardener Booth at the Indiana State Fair for an entire day this year. On Sunday, August 11, Jeff Schafer, Tom Lovell, David Dunatchik, Diana and Herman Young, and Evelyn Harrell took turns answering well over 100 questions that ran the gamut of gardening. Staffing the Master Gardener booth is fun to do, and it is always an educational experience for the volunteers.

Speaking of the State Fair, it was announced at the recent board meeting that Preston Gwinn took third place in the Watermelon Spitting Contest. Way to go, Preston!

### **Diana Young is the Master Gardener representative to the M C Fair Board**

At the same board meeting it was learned that appointments to the Monroe County Fair Board are coming up. Herman Young, current MCMGA representative to the Fair Board requested a change of representation, and as a result, Diana Young was appointed the MCMGA representative to the Fair Board. Thank you, Herman—Master Gardeners will miss you at our board meetings.

### **Master Gardeners at the Monroe County Fair**

Master Gardeners provided excellent assistance during the intake periods for flowers and vegetables at the Monroe County Fair. Diana Young reported that due to the amount of help, she was able to finish the paperwork in record time. Garden Chats on tomatoes, soil health, and container gardening were well attended. Dave Dunatchik painted and rebuilt the gazebo used on the Community Building patio to display the winners. Mary Cusack, Sydley Skolnik, Tom Lovell, and Dave Dunatchik were among those who came back at the end of the fair to help clean up the patio area.

### **A new education opportunity**

Please check out Amy's article on a new education opportunity for Master Gardeners in this issue.

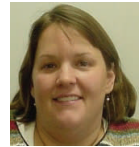
### **Roots and Shoots on Facebook**

Our Director of Records, Abe Morris, announces that *Roots and Shoots* is now on Facebook! Look for it, and be sure to 'like' it. Add comments; add gardening tips; add locations for good gardening advice. Use it!

(continued on page 3)

## New Master Gardener leadership training

By Amy Thompson



Monroe County Master Gardeners are invited to participate in the leadership development training, *Purdue Master Gardeners...Growing Through Leadership*. This program is developed to train Purdue Master Gardeners in the area of leadership development to increase the capacity of existing and emerging leaders to serve in leadership positions within our Master Gardener Association and our community. Cost is \$60 per participant.

The program will be held beginning September 26 at the Purdue Extension Monroe County office, 3400 South Walnut Street, education room from 6:00-9:00 p.m. The topics to be covered are:

September 26—*Understanding Personality Type*

October 3—*Understanding the Nature of Leadership and Communicating for Leadership Effectiveness*

October 10—*Working Together*

October 17—*Leading Boards and Committees*

October 24—*Managing Conflict*

Applications for the program, along with additional information will soon be available on our website [www.mcmga.net](http://www.mcmga.net). The MCMGA board approved scholarships for this program at their August 28 board meeting. These scholarships will cover half of the costs for any active MCMGA member, lowering the program fee to \$30. Please contact Amy at [afthompson@purdue.edu](mailto:afthompson@purdue.edu) or 812-349-2575 if you have questions.

## Monroe County Fair help appreciated

By Esther Minnick and Diana Young

Thank you to everyone who helped with the 2013 Monroe County Fair. This was the best fair we have had for a long time. It was because of all of you who helped so much. The pre-fair preparation, set up, vegetable show, flower shows, paper work, and break down all went so well because of you. We cannot thank you enough. You made our job so easy.

### Member news (continued from page 2)

#### **Julio Alonso to speak at our November meeting**

*Looking ahead:* Our speaker at the November Holiday Dinner on November 12 (it's early this year) will be Julio Alonso, Executive Director of Hoosier Hills Food Bank, and we will be contributing food items to the Food Bank. Watch for food sales and discounts and start stocking up on items now!

# A bitter pickle to swallow

Submitted by Amy Thompson

A bitter taste in cucumbers is the result of stress that can be caused by a number of factors, including heredity, moisture, temperature, soil characteristics, and disease. Most often this occurs during the hot part of the summer or later in the growing season.

Two compounds, cucurbitacins B and C, give rise to the bitter taste. Though often only the stem end is affected, at times the entire fruit is bitter. Also, most of the bitter taste is found in and just under the skin. Bitter fruit is not the result of cucumbers cross-pollinating with squash or melons. These plants cannot cross-pollinate with one another.

Often newer varieties are less likely to become bitter than older ones. Proper cultural care is also often helpful. Make sure plants have the following:

- Well-drained soil with a pH between 6.0 and 6.5. Plenty of organic matter also helps.
- Mulch. Mulch helps conserve moisture and keeps roots cool during hot, dry weather.
- Adequate water especially during the fruiting season.
- Disease and insect control.

## Follow Monroe County Master Gardeners on Facebook

By Abe Morris

MCMGA now has its very own Facebook page! We will be posting regular updates about upcoming activities, photos and reports of events, articles on gardening, and whatever else will interest our members. If Facebook is something you're not interested in, then never fear, we'll still be keeping in touch through all our current channels of email, *Roots and Shoots*, and our monthly meetings. Still we encourage you to check out our Facebook page. Signing up for a Facebook account is easy, and you might just find it to be a great way to stay in touch with your friends, family, and fellow Master Gardeners. To follow us on Facebook, login to Facebook, search for *Monroe County Master Gardeners Association*, and look for the big sunflower. Click the "Like" button, and that is all there is to it! You can also preview the Facebook page at the link below. See you on Facebook!

<https://www.facebook.com/pages/Monroe-County-Master-Gardener-Association/298126543646583>



## Hilltop happenings

Submitted by Lea Woodard



Hilltop was a popular destination this past summer for many local children. Over 180 children visited Hilltop through various summer camps, day-care, school groups and the youth garden program. In addition to our own youth garden program, groups of students from the Hoosier Courts Daycare, Carousel Day Care, Kid City Original, Kid City Quest and the Boys and Girls Club came to Hilltop over the summer to learn about plants and nature. Students learned how to save seeds, start seeds, dye with indigo, weave baskets, beekeeping, make and apply compost tea to the garden, plant a variety of plants and

harvest! To see pictures of these events, visit Hilltop's Facebook page: [facebook.com/hilltopgardennaturecenter](https://facebook.com/hilltopgardennaturecenter) or Hilltop's website: [iub.edu/hilltop](http://iub.edu/hilltop).



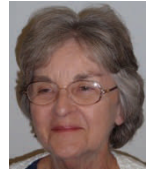
The gardens at Hilltop are looking wonderful this time of year. The annual flower border colorfully guides visitors into the gates of Hilltop displaying a variety of flowers that have also been planted on the IU campus grounds. The cut flower garden is bursting with a variety of pinks, purples, oranges, yellows and reds. The highlight of the gourd walk this year is the long snake gourds that are hanging from the top of the fencing and almost touching the ground. Our vegetable gardens are producing a bountiful harvest, much of which is going to the Hoosier Hills Food Bank and the Community Kitchen of Monroe County, Inc.

When visiting Hilltop, remember to stop by the giant pumpkin that one of our volunteers is growing. (It is growing just south and west of the pollinator garden.)

Visit Hilltop anytime Monday-Saturday 8:30 a.m.-4:30 p.m. and on Tuesdays and Fridays until 6:00 p.m.

# Shining the spotlight: Marilyn Bourke

By Nancy White



Our member spotlight shines this month on Marilyn Bourke, class of 2012.

*“When the world wearies and society ceases to satisfy, there is always the garden.”* Gardening is a lot of work, but I find peace when I garden. My uncle always said, “There is nothing more beautiful than a well kept garden.”



Words above from Marilyn Bourke explain a lot about her and her love of gardening. She was born in Bloomington where her family had a very large vegetable garden. As a child, she helped set and water the plants in the spring and helped harvest when ready. Marilyn says, “I hated picking green beans, but they tasted so good.”

Marilyn has gardened all of her life, but now her gardens mostly contain flowers. With a very small yard, she still manage to grow small amounts of strawberries, blackberries, blueberries, cucumbers and squash. Tomatoes and peppers and many herbs thrive in pots. Marilyn’s main challenge is space and overcrowding. She says, “My flower gardens are not very formal or orderly—I want to plant one of everything and have something blooming all the time. I find joy in the variety of plants in my gardens.”

An intern in the 2012 class, Marilyn became a Master Gardener in 2012, and Advanced in 2013. While volunteering mostly in the Wonderlab Garden, she has also worked in the fairgrounds Demo Garden and volunteers at the Garden Fair. Marilyn comments, “I like working with the team of volunteers at the Wonderlab who are always willing to share their knowledge and expertise.”

Combining travel with visiting gardens has allowed her to see some beautiful gardens in St. Louis, Toronto, England, and Hawaii. In addition to gardening and traveling, Marilyn enjoys history and genealogy and belongs to the Monroe County History Club, The Monroe County Historical Society, The American Legion Auxiliary, and several nursing organizations.

We thank Marilyn for sharing her gardening thoughts and history with us. We wish her many more years of gardening pleasure.

## **All-America selections announce the first 2014 winners**

All-America Selections (AAS) has announced the first of the AAS Winners for the 2014 gardening season. One, ‘Sparkle White’ gaura, is a Bedding Plant Winner, and one, ‘Mascotte’ bean is a vegetable. *From [www.all-americanselections.org/](http://www.all-americanselections.org/)*

# Renew your Master Gardener membership

By Evelyn Harrell

On our website, [www.mcmga.net](http://www.mcmga.net), a form is now available for renewing your 2014 Master Gardener membership, and a copy of the renewal form is included in the mailed September issue of *Roots and Shoots*. Dues are \$10 per person and \$15 per household.

The information that you provide on the membership application to indicate your interests in the association's activities is very important. We use this information to link you up with projects you enjoy and that interest you. The information also suggests which activities are of interest to members as a whole.

To meet the timelines for our yearbook, *folia and flora*, we ask that membership renewals be returned by not later than November 1, 2013. Contact information for renewals received after December 31 will not be listed in our membership book. Renew today!

## Save the date

By Nancy White

The annual Master Gardener Garden Fair date has been set by the board for Saturday, April 5, 2014. Put the date on your calendar now, and be sure to spread the word to friends and neighbors. For our new members, our Garden Fair is a community event at the National Guard Armory on south Walnut Street. Vendors with garden-related products and services plus local horticulture related non-profits set up interesting and informal booths. One of the highlights is our Garden Thyme Café, offering lunch, coffee, cold drinks, and homemade desserts all day. Profits from the Garden Fair support our grant program. In 2013 we awarded \$2,000 in grants to non-profit horticulture projects in Monroe County. Committees plan all aspects of the fair and you can sign up to volunteer at our September 24 general meeting. All hands are needed for this signature event.

## Trees coloring early

Submitted by Amy Thompson

We are seeing a number of trees, especially maples, that are showing fall colors early. Often it is not the whole tree but sections. As a rule, we consider early coloration as bad news as it often means the tree is under a great deal of stress. However, this year, many of the trees showing coloration look perfectly healthy. We think what has happened is the trees have come through a very mild and moist summer through much of the state and never hardened off to hot temperatures.

Now that the weather has changed, the tree is simply entering dormancy early. The tree has had plenty of time to store the energy reserves it needs to survive the winter.

So, do we need to do anything? Yes, we do. Keep the soil moist as many trees have had root systems damaged from the last couple of years. We need to give that root system time to recover. This is especially important for areas that are still experiencing drought or have had so much rain that soils were saturated. Lack of oxygen from saturated soils is just as damaging to a root system as lack of water (from <http://www.hfrf.ksu.edu/p.aspx?tabid=764>)



# Everybody's home

By Dianne May



Over the past months we've looked at the amazing way plants use elements from the environment to nourish themselves. But plants live only for a while. What happens to the carbon, phosphorus, and nitrogen when a plant dies? Then the plant has to be broken down so all the elements can be recycled, and it has bacteria do a great deal of the work.

Bacteria break down the large, complex molecules in once-living things into sugars and fatty and amino acids. They go to work quickly on the easily-digested sugars in still-fresh plant material. Then they wait for other members of the soil food web to break down harder-to-digest complex carbon chains before they finish the job. Some bacteria specialize in oxidizing sulfur. Others are essential for the nitrogen cycle. No bacteria, no recycling. Without them, we'd run out of the elements of life pretty fast.

A lot of the nutrients in a dead plant would be leached out of the soil if bacteria did not break them down, ingest them and use them in their own cell structure. Since bacteria don't travel very far, nutrients remain in the upper levels of the soil around plant roots, where they're needed. Protozoa and other organisms eat the bacteria and excrete excess nitrogen in their wastes in a form plants can take up.

A group of bacteria-look-alikes are also at work in the soil. Archaea are the same size as bacteria, reproduce in the same way, and come in the same three basic shapes. But they have such a distinct genetic makeup that they've been given their own trunk on the tree of life—bacteria, eukaryotes (all plants and animals), and archaea. They weren't even identified until the early 1970s. These are the guys who live in thermal vents on the ocean floor, in lakes salty enough to float a car, and in places with a pH as low as 1. They also live in the soil.

Like bacteria, they break down organic material and recycle the elements that plants need to live. They play a big role in the carbon cycle as well as in the nitrogen cycle. Some archaea can oxidize sulfur compounds, releasing it from rocks and making it available to other organisms.

Some archaea are anaerobic; that is, they can't stand to be around oxygen. When nitrogen and phosphorus from chemical fertilizers wash off agricultural fields in the Midwest, they end up in the Mississippi River and provide nutrition for giant blooms of algae and cyanobacteria which use up all the oxygen in the water and create a huge dead zone at the river's mouth. Anaerobic archaea are just the thing to decompose these algae blooms.

Archaea are part of the soil food web, along with bacteria and fungi. Because they were so recently discovered and because they look so much like bacteria, there's a lot about them we don't understand. Scientists have discovered that they play a major role in the process of fixing nitrogen in the soil, and they appear to do a great deal more we don't know about.



# Volunteer opportunities

Compiled by Nancy White

Location	Time	Jobs	Contact
Hilltop Gardens	year around	various	Charlotte Griffin, 345-8128
MG Demonstration Garden	seasonal	various	Herman Young, 322-5700 Jeanie Cox, 360-3587
MCMGA Garden Walk Committee	year around	select gardens and plan picnic	Evelyn Harrell, 339-0572
Bloomington Community Orchard	seasonal	various	Stacey Decker, <a href="mailto:getinvolved@bloomingtoncommunityorchard.org">getinvolved@bloomingtoncommunityorchard.org</a>
Cheryl's Garden at Karst Farm Park	summer	design and maintain	Nancy Fee, 332-1940
T. C. Steele SHS	seasonal	various	Davie Kean, 988-2785
Flatwoods Park Butterfly Gardens	seasonal	various	Cathy Meyer, 349-2575
MCMGA Horticulture Hotline	year around	inquiries & research	Amy Thompson, 349-2575
MCMGA Speakers Bureau	year around	various	Amy Thompson, 349-2575
MCMGA Newsletter	year around	write articles	Helen Hollingsworth, 332-7313
MCMGA Web Site	year around	various	Stephen Anderson, 360-1216
MG Program Committee Member	year around	plan MG programs	Sandy Belth, 825-8353 Susan Lovell, 339-5914
Middle Way House	seasonal	various	Clara Wilson, 333-7404
Wylie House	year around	various	Sherry Wise, 855-6224
Mother Hubbard's Cupboard	year around	education, resource	Kendra Brewer, <a href="mailto:garden@mhcfoodpantry.org">garden@mhcfoodpantry.org</a>
WonderLab Garden	2 times monthly	various	Nancy White, 824-4426
Hoosier Hills Foodbank	year around	various	Nicole Richardson , 334-8374

**Remember to wear your badge when volunteering and keep a record of your hours.**

# A call to front yard gardening arms



A book review by James Bradley Wells

When we moved to Bloomington in summer 2011, my wife Stacey and I rented an apartment, but soon decided to put down roots and purchase our first home. The timing of our lease's end and the best fit between our preferences and what was available in the market meant that we settled on a home with one major flaw for aspiring gardeners: it is built on a microscopic lot. In our first summer as homeowners, we pursued the quick gardening fix of setting up two raised beds in the swatch of front yard, the only part of our property exposed to full sun. The successes of that experiment converted us to the cause of maximizing the food-productivity of our small yard. Ivette Soler's *The Edible Front Yard: The Mow-Less, Grow-More Plan for a Beautiful, Bountiful Garden* (Portland and London: Timber Press, 2011) has been a source of ideas and insight—sometimes. And sometimes not.

Ivette Soler is a Los Angeles garden designer and writer who has blogged on gardening since 2006 (most recently at [www.thegerminatrix.com](http://www.thegerminatrix.com), though the site appears to have been inactive since May 2012). *The Edible Front Yard* progresses from an introductory discussion of how to balance gardening ambitions and curb appeal to ethical do-it-yourself food production.

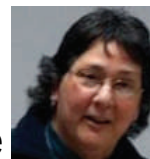
Soler's early chapters establish principles of her approach to front yard garden design and provide illustrative examples of ornamental edibles. But many of her choices—artichokes, bananas, lemongrass, agave, and myrtle—reflect the fact that Soler's audience is global, not local. Despite the fact that many of these plants are not an option for those of us who live in particular plant hardiness zones rather than in the imagined unizone of her book, Soler draws upon her examples to instruct readers about how to think about designing gardens with plant color and texture in mind, a transferable skill set.

After giving a big picture view of garden design and planning, *The Edible Front Yard* walks through putting theory into practice: taking stock of one's property, making use of what is on-hand and dispensing with what is undesirable, establishing hardscape, maintaining the new garden, and enjoying the harvest, while planning for the next gardening season. Gorgeous—and motivational!—photography fills *The Edible Front Yard*.

I found Soler's book most useful when it comes to collecting in one place how-to information about designing hardscape, espaliering fruit trees, removing sod, taking the hellstrip from hellacious to herbaceous, laying pavement stones, and new (to me) ideas for washing harvested food and freezing fruit. The book also includes information about composting, pests, and trellises.

*The Edible Front Yard* enjoys the endorsement of Fritz Haeg, a landscape design artist who is a leading figure in edible gardening and permaculture ([www.fritzhaeg.com](http://www.fritzhaeg.com)). Soler's enthusiasm for creating edible landscapes lives up to Haeg's high regard for *The Edible Front Yard*. Soler's infectious drum-beat about the value of growing food, creatively engaging in one's lived space, and the social repercussions of these practices instills confidence that you are doing good if you tear up your lawn and plant vegetables, no matter what the neighbors may think. And Soler tempers the visionary with practical concern for making the home attractive and inviting.

# Fall a good time to replace trees and shrubs



By Rosie Lerner, Extension Consumer Horticulturist, Purdue

Many Indiana gardeners lost landscape plants over the past few years; particularly plants that were already in trouble and perhaps were dealt a fatal blow by extreme heat and drought. Cooler temperatures and more adequate rainfall can make fall an ideal time to replace or add to your woody plant collection. But keep the following notes in mind.

Plants that are most successful for fall planting include most shrubs, crabapple, hackberry, hawthorn, honey locust, linden, most maples, sycamore, pine, and spruce. Some plant species do not adapt well to fall planting because they are slow to establish new roots and/or unusually susceptible to winter damage. Magnolia, dogwood, tulip tree, sweet gum, red maple, birch, hawthorn, poplars, cherries, plum, oak, hemlock, ginkgo and broad-leaved evergreens are among the plants that are best saved for spring planting. However, you may justify the risk by finding exceptional bargains in the fall. Many garden centers are motivated to sell stock because of the expense of keeping the plants over winter.

Select balled-and-burlapped or container-grown plants rather than bare-rooted stock. Bare-root plants should only be planted in late winter or early spring while the plants are still dormant.

Avoid planting large trees in the fall. They can be risky to transplant in any season, but are particularly so when foliage is present. Leave the large trees until spring, and get a professional to do the moving. They have the proper equipment and expertise to help ensure a safe move.

Plant trees and shrubs early enough in the fall for the plant to develop a good root system. Soil temperatures should be well above 55° F at a depth of six inches at planting time. This condition usually exists until early to late October, depending on your location. Of course, weather conditions vary from year to year and with microclimates around the home landscape.

Water as needed to supplement rainfall to supply about one inch of water per week. Continue weekly watering until the ground is frozen, even after deciduous plants have lost their leaves. Wrap the trunks of thin-barked, young trees in late November to prevent frost cracks, sunscald and animal damage, but be sure to remove the wrap in March.

Ground covers and shallow-rooted shrubs may heave out of the ground by alternate freezing and thawing of the soil that often occurs in winter. A 2-4 inch layer of mulch can help prevent wide soil temperature fluctuations. Apply materials such as compost, shredded bark or straw in late November or early December, after the plants are fully dormant and the soil is cold.

For more information on proper tree planting and care, download Purdue Extension bulletin HO-100, *Planting Landscape Trees and Shrubs* (PDF: 707 KB).

## Monroe County Master Gardener Association

Cooperative Extension Service  
3400 South Walnut Street  
Bloomington, IN 47401

Helping others grow!



### MCMGA General Meeting

September 24, 6:30 p.m., Extension Office

Speaker: Marc Evans, Putnam County Extension Educator

Topic: *Cover Crops for Home Gardeners*

Education hour: 1

## 2013 MCMGA Board

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**Extension Educator:** Amy Thompson

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## Master Gardener Calendar

**September**—Renew annual MCMGA membership; see the renewal blank [www.mcmga.net](http://www.mcmga.net)

**September**—Sign up for *Purdue Master Gardeners...Growing Through Leadership*; see article on page 3

**September**—Follow MCMGA on Facebook; see article on page 4

**September 24**, 6:30 p.m., general meeting in the extension office education room; enjoy great snacks, visit with gardeners, and earn an education hour