June was a big month for Monroe County Master Gardeners. A good turnout enjoyed the MG Garden Walk with tours of three gardens at Hilltop Garden-Nature Center. Young members of the new Junior Master Gardener program used a slide show to describe their gardening efforts and new knowledge and helpful gardening apps for your smart phones; Linda Heath and Bob Baird took us back to Elizabethan times in the Shakespeare Garden; and host-members answered questions and pointed out highlights of the shade garden, where most members remained afterward to enjoy their lunches under the cool branches.

Less than a week later 6 members of the MCMGA were fortunate to attend the very well planned 2016 Purdue Master Gardener State Conference at Purdue. This writer and Maren Claus, Mary Cusack, Eryn Cusack, Vicky St. Myers, and scholarship winner Ada Simmons enjoyed it immensely. We were joined by MCMGA members Susan and Don Sachjen who were there to represent Greene County. It was exciting to be present at the banquet when the brochure highlighting native plants at the Monroe County Courthouse took the 3rd place Search for Excellence Award. The garden of native plants on the northeast corner of the Courthouse was a collaborative effort on the part of Sandy Belth, Al Cooper, Eryn Cusack, Mary Cusack, Shari Frank, Abe Morris, and Robin Roth. The brochure featuring artwork by Eryn Cusack is outstanding. Then just moments later Mary Cusack heard her own name called – 3rd place in the photo contest. Congratulations again to those winners! In a word, the 2016 state conference was a resounding success.

In lieu of a state conference in 2017, our own association will be hosting a day long tour. Stay tuned! In the meantime, save this date so you can join the fun at the next state conference - June 7-9, 2018 in Danville, IN, an easy drive to Hendricks County. In the warm days ahead, spend some time indoors to go online and check out our Facebook scene where you can learn about native bees – yes, native bees – then get ready for 2018 by checking out Hendricks County where you can learn how Pittsburgh is dealing with the noxious knotweed. Hmm. Honeysuckle, anyone?

The next general meeting is July 20 at the demo garden. See you there for a fun time of working together and creating an educational experience for visitors!

- Evelyn Harrell, MCMGA President
Garden Walk 2016 Images
The Myth of Soil Amendments:

"When transplanting trees or shrubs into landscapes, amend the backfill soil with organic matter."

Of all the fictions that abound in popular horticultural, none is as deceptive as this one. It stems from the old adage to “dig a five dollar hole for a fifty cent plant.” Adding organic matter to a planting hole appears to be a promising step towards achieving that five dollar hole. It seems logical that steer manure, peat moss, compost, etc. would improve poor soils by increasing aeration, nutritional value, and water holding capacity. And it does - in the immediate vicinity of the planting hole. Eventually, amended planting holes will have negative consequences to plant health. To understand why, it’s necessary to examine plant physiology and soil water relations.

Let’s say you have incorporated the recommended 25-50% organic matter to your backfill. (Remember that an ideal soil contains 5% organic matter by volume.) The initial results are positive; roots grow vigorously in this ideal environment as long as irrigation is provided. But what happens when these roots encounter the interface between the planting hole and the native soil? Native soil contains fewer available nutrients, is more finely textured and is less aerated. Roots react much in the same way as they do in containers: they circle the edge of the interface and grow back into that more hospitable environment of the planting hole. The roots do not establish in the native soil, eventually resulting in reduced growth rates and hazard status as crown growth exceeds root ball diameter.

Soil water movement is problematic as well. Amended backfill has markedly different characteristics than surrounding native soil; it is more porous and water will wick away to the finer-textured native soil. In the summer, moisture within the planting hole will be depleted by the plant but not replaced by water held more tightly in the native soil. This results in water stress to the plant unless the planting hole is kept irrigated, a costly and often unrealistic practice. During wet seasons water will move quickly through the amended soil only to be held back by the more slowly draining native soil. The resulting bathtub effect, wherein water accumulates in the planting hole, floods the roots and eventually kills the plant.

Finally, all organic material eventually decomposes. If you’ve incorporated one quarter or one half organic matter by volume, within a few years you will have a sunken garden in your landscape. This only exacerbates the flooding problem during wet conditions.

No scientific studies to date show any measurable benefit of soil amendment except in containerized plant production. Plants grown in native soil consistently showed better root establishment and more vigorous growth. Only one study reported no negative effects of amending soil with organic matter - but there were no benefits, either. When you consider the cost of materials and labor needed to incorporate soil amendments, it’s difficult to justify the practice.

This outdated practice is still required in the specifications of architects, landscapers, and other groups associated with landscape installation. It is still recommended by garden centers and gardening articles. And there is a multi-million dollar soil amendment industry that has little interest in debunking this myth. As responsible green industry professionals, we need to recognize and avoid non-sustainable management practices.

Bottom line:

- Select suitable plant species for site conditions
- Don’t be an "enabler": use native soils for backfill without amendment
- In extreme cases, replace the entire planting site with topsoil
- Mulch landscapes well with wood chips or another water-holding material

For more information, please visit Dr. Chalker-Scott’s web page at http://www.theinformedgardener.com.

- Linda Chalker-Scott, Ph.D. Extension Horticulturist and Associate Professor, Puyallup Research and Extension Center, Washington State University
Award received!!!

MCMGA was awarded 3rd place in the “Search for Excellence” contest at the State Master Gardener Conference on June 17 at West Lafayette, Indiana. The award was for the brochure entitled “Monroe County Courthouse Goes Native” which highlights the native garden located at the County Courthouse in Bloomington.

Master Gardeners Eryn Cusack and Shari Frank created the brochure with Shari doing the text research and Eryn illustrating the brochure. Help, guidance and support was given and appreciated from Amy Thompson (Extension Educator) and Todd Stevenson (Monroe County Stormwater Coalition).

An illustrated poster about the brochure was created and displayed at the State Conference and the brochure was available for everyone to look at and take a copy home.

Accepting the award at the Friday evening Awards dinner was Mary Cusack and Eryn Cusack. It was a special moment for Monroe County Master Gardeners and a feather in the cap for Monroe County as well!

The brochure may be viewed on the MCMGA website using the link:

http://www.mcmga.net/newsletters/Courthouse_Goes_Native.pdf

or, visit the website and clicking “On-Line Gardening Links” – “Native Plants”.

- By Mary Cusack,
  Director At Large

What’s growing?

- butterflyweed
- echinacea
July Grow Calendar

HOME (Houseplants and indoor activities)

Watch closely houseplants that have been set outdoors. They need more water than they did indoors. They can dry out rapidly in hot, summer breezes.

Propagate houseplants by taking cuttings from vigorously growing plants. Place cut end in rooting media, such as perlite, vermiculite or peat moss soil mix. Enclose in plastic, and keep out of direct sunlight.

YARD (Lawns, woody ornamentals and fruits)

Keep newly established plants watered during dry weather. Allow water to penetrate deeply into soil rather than sprinkling frequently and lightly.

Apply mulch around young plants to help conserve soil moisture and control weeds.

Do not plant bare-root or ball-and-burlap stock at this time of year. Container-grown plants still may be planted, but only if you can keep them well watered.

Continue a fruit tree spray program to keep diseases and insects under control.

Remove water sprouts (sprouts from the trunk) and suckers (sprouts from the roots) from fruit trees.

For those fortunate growers who have a good crop this year, prop up fruit tree branches that are heavily loaded with fruit.

Pinch off faded rose blossoms. Continue rose spray program to control insects and diseases.

Many Indiana trees are plagued by "lawn-mower blight." Be careful to avoid nicking tree trunks while mowing.

When watering lawns, apply 1 to 1.5 inches of water in a single application per week. Frequent, light sprinklings will encourage roots to stay shallow, making them more susceptible to drought.

Mow grass one-half inch higher than usual during the dry, summer months to help conserve soil moisture. Do not mow when lawn is under severe drought stress.

Don't remove clippings from the lawn unless grass is excessively tall or weedy. Clippings return some nutrients to the soil and do not add to thatch buildup.

GARDEN (Vegetables, small fruits and flowers)

Supplement natural rainfall, if any, to supply 1 to 1.5 inches of water per week in a single application.

Start seeds of broccoli, cabbage and Brussels sprouts to transplant later for a fall harvest. Harvest crops such as tomatoes, squash, okra, peppers, beans and cucumbers frequently to encourage further production.

Complete succession planting of bush beans and sweet corn.

Harvest summer squash while small and tender for best quality.

Standard sweet corn is at its peak for only a day or so. The supersweet corn maintains its peak quality for a longer period. Harvest when silks begin to dry and kernels exude a milky, rather than watery or doughy, juice when punctured.

Broccoli will form edible side shoots after the main head is removed.

Mulch garden to control weeds and conserve soil moisture.

Make sure potato tubers, carrot shoulders and onion bulbs are covered with soil to prevent development of green color and off flavors. Applying a layer of mulch will help keep them covered.

Allow blossoms on newly planted everbearing strawberry plants to develop for a fall crop.

July is a good time to fertilize strawberries with .5 pound of actual nitrogen per 100 feet of row.

Harvest raspberries when fully colored and easily separated from stem. After harvest is complete, prune out the fruiting canes to make room for new growth.

Remove faded blossoms from annual and perennial flowers to prevent seed formation.

Condition flowers cut from the garden for arranging by removing lower leaves, placing cut stem ends in warm water and storing overnight in a cool location.

The foliage of spring-flowering bulbs can be removed safely after it fades. This also is a good time to lift the bulbs for transplanting or propagation.

- B. Rosie Lerner
Extension Consumer Horticulturist
## Volunteer Opportunities

<table>
<thead>
<tr>
<th>Organization</th>
<th>Time</th>
<th>Jobs</th>
<th>Contact</th>
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</thead>
<tbody>
<tr>
<td>Bloomington Community Orchards</td>
<td>Seasonal</td>
<td>Maintenance, All levels of expertise</td>
<td>Stacey Decker</td>
</tr>
<tr>
<td>2120 S. Highland Avenue (Winslow Woods Park) <a href="http://www.bloomingtoncommunityorchard.org">www.bloomingtoncommunityorchard.org</a></td>
<td></td>
<td>welcomed!</td>
<td><a href="mailto:getinvolved@bloomingtoncommunityorchard.org">getinvolved@bloomingtoncommunityorchard.org</a></td>
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<tr>
<td>Cheryl's Garden at Karst Farm Park</td>
<td>During growing season</td>
<td>Design &amp; Maintenance</td>
<td>Linda Emerson</td>
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<tr>
<td>2450 S. Endwright Road, Bloomington</td>
<td></td>
<td></td>
<td>812-345-2913 (cell)</td>
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<tr>
<td>Courthouse Native Garden</td>
<td>Seasonal</td>
<td>Maintenance</td>
<td>Todd Stevenson</td>
</tr>
<tr>
<td>Downtown Square</td>
<td></td>
<td></td>
<td><a href="mailto:tstephenson@co.monroe.in.us">tstephenson@co.monroe.in.us</a></td>
</tr>
<tr>
<td>Flatwoods Park Butterfly Gardens</td>
<td>Seasonal</td>
<td>Maintenance &amp; Rejuvenation</td>
<td>Cathy Meyer</td>
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<tr>
<td>9499 W. Flatwoods Rd., Gosport</td>
<td></td>
<td></td>
<td>812-349-2805</td>
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<tr>
<td>Growing Opportunities Hydroponic Garden</td>
<td>Year-round</td>
<td>Education &amp; Maintenance</td>
<td>Nicole Wooten</td>
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<tr>
<td>Stone Belt Facility—Tenth St., Bloomington</td>
<td></td>
<td></td>
<td><a href="mailto:nicole@insccap.org">nicole@insccap.org</a></td>
</tr>
<tr>
<td>Hilltop Garden &amp; Nature Center</td>
<td>Year-round</td>
<td>Maintenance of Gardens for Shade, Herbs, Pollinators, &amp; Containers</td>
<td>Charlotte Griffin</td>
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<tr>
<td>2367 E. Tenth St., Bloomington</td>
<td></td>
<td></td>
<td>812-345-8128</td>
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<tr>
<td>Hinkle-Garton Farmstead</td>
<td>Year-round</td>
<td>Herb, Orchard, Butterfly, &amp; Woodland Gardens, Invasives Removal, Soil Reclamation</td>
<td>Danielle Bachant-Bell</td>
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<tr>
<td>2920 E. Tenth St., Bloomington</td>
<td></td>
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<td>812-336-6141 or 812-360-6544 (text)</td>
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<tr>
<td>Hoosier Hills Food Bank</td>
<td>Year-round</td>
<td>Plant, Harvest, and Compost (training provided)</td>
<td>Bobbi Boos</td>
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<tr>
<td>Will Detmer Park, 4140 West Vernal Pike</td>
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<td>Call Ryan Jochim 812-334-8374</td>
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<tr>
<td>Mother Hubbard's Cupboard</td>
<td>Year-round</td>
<td>Seasonal Garden Tasks</td>
<td>Kendra Brewer, Coordinator</td>
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<tr>
<td>1100 W. Allen St., Bloomington</td>
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<td><a href="mailto:garden@mhcfoodpantry.org">garden@mhcfoodpantry.org</a></td>
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<tr>
<td>MHC Food Pantry</td>
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<tr>
<td>T. C. Steele</td>
<td>Seasonal</td>
<td>Maintenance, Invasives Removal</td>
<td>Anthony Joslín</td>
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<tr>
<td>4220 T. C. Steele Rd., Nashville</td>
<td></td>
<td></td>
<td>812-988-2785 - leave a message</td>
</tr>
<tr>
<td>Wonderlab Garden</td>
<td>Seasonal</td>
<td>Education, Maintenance, Volunteer Management</td>
<td>Nancy White</td>
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<tr>
<td>308 W. Fourth St., Bloomington</td>
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<td>812-824-4426</td>
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<tr>
<td>Wylie House</td>
<td>Year-round</td>
<td>maintenance of heirloom garden, seed saving</td>
<td>Sherry Wise</td>
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<tr>
<td>307 E. Second St., Bloomington</td>
<td></td>
<td></td>
<td>812-855-6224</td>
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<tr>
<td>MCMGA</td>
<td>Year-round</td>
<td>Various</td>
<td>Demo Garden – Herman Young 812-322-5700</td>
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<td></td>
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<td>Garden Walk – Mary Jane Hall 812-345-3985</td>
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<td>Program – Sandy Belth 812-825-8358</td>
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<td>Website – Stephen Anderson 812-860-1216</td>
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**Board Member Spotlight:**

**David Dunatchik**

**R&S:** Who are you? Tell us a little about yourself.

**David:** I am David Dunatchik, a retired Park Ranger and long-time wantabe gardener. I remember as a high schooler trying to graft rose buds to another rose to try to get the buds to “take” and grow two rose varieties on one plant. My parents had a very small garden and I often helped with it. Even in college I managed to plant some vegetables at my [now] wife’s parents home. It was there at the University of Michigan that I received my Master’s Degree in Wildlife Management.

I joined the National Park Service right out of college going to Yosemite in 1967, but my gardening activities had to be put on the back burner. It was park policy that we could not garden in the park [where I lived] because of fear of introducing exotics into the environment. So my interest turned to bird watching, which was also my high school and college passion.

I spent 30 years with the NPS in various parks including five years in Yosemite, CA, then to Haleakala NP on Maui, Hawaii, and Big Thicket National Preserve near Beaumont, Texas. I spent the remainder of my career working in a large number of western parks out of the Rocky Mountain Regional Office in Lakewood, Colorado. I retired there in December of 1996. We continued to live in Conifer Colorado until January 2005 when we moved to Bloomington. We loved living in the mountains, but trying to garden on decomposed granite at 9,000’ proved impossible.

**R&S:** When did you join the MCMGA?

**David:** I received my Master Gardeners training in 2007 and I am now at the advanced –silver level. My main gardening interest is to transform my back yard into a place that is highly attractive to birds, both for nesting and for food and shelter.

**R&S:** What drew you to join the Master Gardener program?

**David:** While working in the Regional Office in Lakewood, CO a coworker told me about the program and encouraged me to take the class with him. I couldn’t at that time due to work conflicts, but the seed was sown. One year the Bloomington MGA had a booth at the convention center and it was there that I learned about the program here.

**R&S:** Where are you from originally?

**David:** My early years were spent in Detroit, then Warren, then Ann Arbor, Michigan. After retiring I wanted to live in a place where I could garden and bird watch, and still be close to the Michigan family. Bloomington fit the bill.

**R&S:** How did you accumulate your volunteer hours? How did you decide where to volunteer?

**David:** I served on the Garden Fair Physical Arrangements committee for five years, volunteered for Master Gardener duties at the Monroe County Fair and the Indiana State Fair for several years. I enjoy helping people learn more about gardening and serving at the various information booths feeds into that enjoyment.

I have served as board Secretary for the last eight + years. I enjoy serving as Secretary because it exposes me to the multitude of issues that the board must discuss and resolve.

**R&S:** Why do you continue your membership?

**David:** I think the main reason for continuing with the program is because there is such a variety of information to learn from the members and guest speakers. In addition, I think the organization provides a needed educational service to the community and I want to be part of that effort.
Purdue Extension Monroe County will be offering a Master Gardener Training program this fall. **Please help spread the word.** The class will meet Wednesdays from 6-9 p.m. When program registration materials become available, interested parties may contact the extension office by calling 812.349.2575 or by emailing afthompson@purdue.edu.

### Submit Your Garden Article

**Roots & Shoots**  
Monroe County Extension Service  
3400 S Walnut St  
Bloomington, IN 47401  
(812) 349-2575  
DaleyHeather7@gmail.com

### About MCMGA . . .

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