Don’t miss this great opportunity to get to know your fellow Master Gardeners, see three unique gardens, and eat some delightful, delectable home cooked dishes. In the mail, you should have already received your special invitation to our own private garden walk. If you did not receive one, please call me at 824-2139. Remember to RSVP if you plan to attend the picnic, and bring a dish to share.

The date is Saturday, June 16, from 4:00 p.m. to 7:30 p.m. One added bonus to this year’s event is that Master Gardeners receive one hour of educational credit for attendance. We will focus on one question or topic from each of the gardens we visit, and we will hold a question and answer time during dessert at the picnic. Please whet your appetite about the three gardens by reading the informative and enlightening descriptions in this issue written by each garden owner, Barb Cappy, Gloria Noone, and Becky Nyberg. Each garden as well as each gardener has an engaging individual personality and style, which comes through in their descriptions. There is much to learn and appreciate from other’s experiences and struggles to adapt to soil, geography, lighting and pre-existing conditions to turn their own unique space into their personal vision of beauty and serenity.

The second 2007 Field Trip is planned for Thursday, June 7. Those attending will visit Oldfield Gardens and the Lilly House at the Indiana Museum of Art in Indianapolis.

Sign Up for Two Later Field Trips
It is not too late to sign up for the remaining 2007 Master Gardener field trips. Trips are open to all Master Gardeners and their guests. On Saturday, August 4, we will travel to the Munchkin Nursery and Shade Garden in DePauw, IN. If you would like to go, contact Ann McEndarfer or Nancy White by phone or email to put your name on the contact list. Car pools will leave Bloomington at 8:00 a.m. and return in the middle of the afternoon after a lunch stop. The last trip of this year will be on Monday, October 8, when we will visit the wonderful garden at Oliver Winery. Plan to join us for these two entertaining events.

Tell Us about Garden Visits
If you visit a special garden, plant nursery, or commercial horticulture location this summer while on vacation, consider sharing your experiences by writing a garden review for Roots and Shoots. Contact journalist Helen Hollingsworth, and she can save room for any upcoming issue. We all like to hear of new gardens and places to visit.

Cold Spell This Past Spring
At the Master Gardener May general meeting, many of us were discussing the strange spring and the damage done by the late spell of cold (continued on page 6)
What Knot Garden by Barb Cappy

My “What Knot Garden”, unlike formal, perfectly sculptured knot gardens of Elizabethan England, is better defined by a second definition of the word “knot”: “something hard to solve or a problem”. My garden is eight acres of “what NOT to plant”. It has a history of human and natural mishaps from drought (a pest control) to water feature (an unpleasant experience).

In 1972, my first husband, Mike, and I moved to this ridge. Sandstone lay just below the surface and our lot had a northern exposure. There were no trees in front and on both sides of our house; so, we planted pine trees and loads of periwinkle to stop erosion. The shallow topping of soil that was there, “ran for the woods” every time it rained. We started to terrace with rock walls and added more periwinkle! Our most difficult project was the circular terrace we built for the swimming pool. When we hit rock, we ground it down with a metal bar attached with rebar in the circle’s center. Today, the area is a level spot for the glider swing Frank, Tyson, and I built last summer. It is still edged with periwinkle!

In the early years, I planted little vegetable gardens. There was more sun then. What did I know or at least what did I expect? Most plants do not flourish in clay, stone, and near pine trees. Three rhubarb plants remain at the site of my last garden. Today, I limit my vegetable garden to one lone tomato plant in a large pot that I roll around on the deck to catch the sun.

Usually the property is lush with flora; however, one summer was so dry nothing remained green at the floor level of our woods. The white tail deer usually enter my yard for recreational eating of my favorite and most expensive plants. This time they moved uphill and out of the woods because they were hungry - very hungry. They were so hungry; they ate everything in sight, including the entire collection of periwinkle. No green leaves remained. Only massive mats of stems, like a telecommunication network of wires, remained sprawled across the ground. Unfortunately, the periwinkle grew back, bigger and better than before.

One day Mike and I discovered a damp area near a rock outcropping. We cleared the leaves away to find a nice flow of water. We continued to beautify that prized spot with wildflowers and stones strategically placed to magnify the sound of running water. Mike built a bridge over the fourth of five little pools and created a nature trail leading from the east side of the yard, through the woods, and ending on the west side. The largest pool became the depository for pet goldfish. Twelve years later tragedy struck when the road caved in above the origin of our “spring”. The East Monroe Water Corporation plugged a lengthy water leak. The skeleton of our beautiful five pooled water feature remains visible today.

Problems abound in my garden: north side and top of ridge, rocky-clay soil, shade, moles, voles, chipmunks, field mice, deer, squirrels, raccoons, wild rose, blackberry, periwinkle, burning bush, autumn olive, wild grape, and bittersweet. Yes, I have it all, and I vigorously attempt to control it. However, when the temperature reaches 55 degrees, I stop pulling things in the woods. I love of nature does not extend to snakes. I delegate pest control to hubby, Frank. You might like to see his birdfeeder fortresses!

Since I took the Master Gardener course, Frank has become even more involved in protecting my flowers from creatures. My three grandsons love to run through the paths and walkways of the garden and help me plant new things. They say they want to be Master Gardeners, too. The love of gardening must be contagious!

In the future, I plan to reconnect the beginning and end of the nature trail and recreate the second smaller bridge at the bottom of the lot. I let Mike’s trail return to nature after he died in 1986. I seriously consider creating a real water feature in the original spot of the water leak. I want to plant a couple of deciduous hollies to lure cedar waxwings in fall and add more flowers and a puddle to attract butterflies.

I am pleased to invite you to share my “What Knot Garden”. Its design grew out of necessity and the shape of the property, not from a master plan. I try to keep it as natural as possible so it will not look contrived and rigid. Although I have hybrids, what I like best are the wildflowers that appear uninvited. Although most of the prettiest spring wildflowers have bloomed and gone, I hope the twayblade (an orchid native to Indiana) is still blooming when you visit. Another plant will be marked with a red ribbon. Can you identify it? Mum is the word. Later at Becky’s house, we will see how many of you know it by name.
My Garden by Gloria Noone

In 2003 I moved from northern California and soon realized that gardening here was going to be very different. Although I was raised in Wisconsin, I moved away as a young adult and never really gardened there or even paid much attention to it. Staples of Indiana gardens were not even sold in the nurseries I had frequented. I wondered what in the world those piles of brown stuff in people’s driveways were – no one mulched where I had moved from. That first season I did absolutely no gardening, as I was called away to help with a family emergency.

I took the Master Gardener class in 2004 in order to learn to identify plants and learn midwestern garden techniques. For instance, you do not prune roses between Christmas and New Year’s in Bloomington. I’d like to think that I am getting better, but I am still learning and experimenting and making lots of mistakes. I started gardening here in 2004.

The former owners of my home grew lots of grass, shrubs, and trees. I have removed four trees, eighteen yews, six burning bushes, numerous other fading shrubs, and many square feet of grass. In the backyard, I added additional fencing to contain my dog and rebuilt the back porch, adding a stone patio and some stepping stones.

My backyard is mostly shady. The front and side yards are mostly sunny. The beds in the side yard are my experimental beds where I try things to see what works and what I like so they are a little bit of lots of things with no rhyme or reason. Because I have a corner lot, the experimental beds are very visible – not a good thing, but it is what it is. Although I have certainly purchased my share of plants, most of the things I acquired because someone asked me if I would like this or that plant. I never say no. Eventually, my budget and knowledge will translate into landscaping the experimental bed area. Improving the soil is high on the priority list.

My plans for this summer include removing more yews, rebuilding the stone wall, and making a pathway on the north side of the house.

National Wildlife Federation Releases Report

The National Wildlife Federation suggests that gardeners may want to visit their website and read their new report, The Gardener's Guide to Global Warming. Here are some topics covered in the new report.

1. Will your state’s tree or flower continue to grow in your state?
   http://www.nwf.org/gardenersguide

2. Global warming means new garden zone maps:
   http://www.nwf.org/gardenersguide/gardenzone.cfm

3. Invasive Plants: America's Most NOT Wanted:
   http://www.nwf.org/gardenersguide/invasives.cfm

4. Take the Gardener’s Guide Pledge and let NWF know what you are doing in your backyard to be more energy efficient:
   http://www.nwf.org/gardenersguide/pledge.cfm

5. Support national action to stop global warming by emailing your representative:
   http://online.nwf.org/gardeneraction

Enjoy the report!
To take action on this issue, click on the link below:
https://online.nwf.org/site/Advocacy?s_oo=26asJXy-coQfRiJxSpq_BA..&id=271
If the text above does not appear as a link or it wraps across multiple lines, then copy and paste it into the address area of your browser.
May is over and what a month it has been! Not only was it one of the driest Mays on record, but also incredibly busy for me. I can’t say that I have ever seen grass go dormant this time of year! At least that left me with more time for real life adventures like my husband’s surgery and my daughter’s high school graduation.

One of the obvious side effects of rain-less days has been the glorious weather we have been enjoying lately. Just one such day greeted our May general meeting and the annual intern graduation celebration. Despite annoyances such as the scarcity of parking and the warm weather, we had a wonderful turnout for our meeting. In the end, I decided that I needed the exercise that walking to and from my car provided for me!

As you may remember from a letter you should have received recently, our Master Gardener board has been working on revising our bylaws and will be voting on them at the July general meeting. The discussion at the May meeting on certain changes in the bylaws was lively and educational. I have to say that I came away from that meeting with an appreciation for how much our members care about our organization. In this day and age when we are all so busy and all too ready to turn the decisions over to others, I found this a comforting reminder of why I love our association so much.

Once again I would like to stress that your board of directors is here to work for you and that your comments and questions are welcome at any time. Our names, phone numbers and email addresses are listed in the newsletter, the membership directory and on the website.

In addition, our board meetings are open to the membership, although a call to either Amy or I would be appreciated so that we may have copies of written materials ready for that meeting for you. Our next board meeting is scheduled for Monday, July 2 at 6:30pm. The location has not yet been determined, so please call to find out more information. Unfortunately, our meeting days and meeting places sometimes vary according to outside circumstances and are often only decided after the newsletter deadline, so a phone call or email to a board member or the Extension Office is recommended. I would hate to find that an interested member missed a board meeting because we had to change the night or venue.

In closing, I once again thank all who braved the parking issues and the heat to meet with us on May 22. If our organization is successful, it is only because members like you care and participate. Even if you were unable to attend, your hard work and volunteer hours are greatly appreciated, and I applaud you.

**Ash Inflorescence (Flower) Galls**

By Gail Ruhl, Senior Plant Disease Diagnostician, Purdue University

We have had several inquiries regarding bizarre looking growths in ash trees. These calls normally come in the fall when galls become more conspicuous after leaves drop from trees. However, it seems that following windy, stormy weather, these strange growths have been found littering the ground beneath ash trees, bringing forth questions from inquiring minds. The broccoli-like growths are caused by an eriophyid mite, Eriophyes fraxinivorus, and consist of a profusion of clubby, distorted flower arts. New galls appear as dark green clusters growing amidst current season’s leaves. Eventually, green galls turn brown-to-black and can remain attached to the twigs for two or more years. Although the galls may reduce the aesthetic appeal of heavily infested trees, they cause no injury to the tree since only the flower parts are affected.
Prior to moving to Bloomington, my husband and I lived for four years in Texas outside Dallas, where it takes a lot of effort to get things to grow. My gardening experience in Dallas has influenced my gardening decisions here in Bloomington. Here is what I learned in Texas:

1. If you are going to invest a lot of money in plants in an area where the rainfall is unpredictable, invest in an irrigation system
2. Planting plans are only a guide; be willing to substitute with plants that are available
3. Generally, plants that are available at local nurseries or garden centers will grow where you live.
4. Miracle Grow works
5. Plant in odd numbers and do a lot of it
6. Deadheading keeps flowers blooming
7. Mulch until you can mulch no more
8. Landscaping increases the value of a home
9. _______ can never be too big or big enough

Our first landscaping project was to get an irrigation system installed and to start our deck. Three years ago, we decided to turn our old garage into a master suite for my dad and to add on a three car garage. In the midst of these projects, one day, I came home from work and found a HUGE hole where our driveway used to be. All of the dirt from the hole was piled in the yard in front of the workshop. The pile of dirt was the size of the workshop. My husband decided to save money by leaving the dirt. I guarantee you that I have spent more money on plants and mulch than what it would have cost to remove that pile of dirt.

My husband created a berm using a borrowed bobcat (and tore up what little remained of the rest of the yard). The first winter, we planted four pine trees and three ornamental trees (two of which died and were replaced by a dogwood and a redbud). I spent the summer of 2005 working on the berm and the landscaping around the addition, while my husband finished the addition. First I rototilled, then raked, then planted, then mulched, then collapsed.

I bought shrubs first, because shrubs take up more space. There are currently 44 shrubs on the berm including cotoneasters, barberry, Miss Kim lilacs, flowering quince, blue spirea, potentilla, tree peony, and potentilla. Over the past three years, I have planted around 150 perennials, including coreopsis (which grows like a weed in Texas), shasta daisies, yarrow, peonies, echinacea, catmint, and globe thistle. Most of which survived and some which did not survive this spring’s freeze. What I don’t have are bulbs and ‘mums.

In addition to the cotoneasters, Miss Kim lilacs and spireas around the house, I have planted several weigela Wine and Roses because it is the first plant in which my husband has shown interest. The wisteria by the deck has been difficult to deal with. I originally used metal trellises, but the weight of the wisteria bent them over. I then asked my husband to build a trellis for it. The trellis he built is sturdy enough to hold a 250 pound man. Two different kinds of butterfly bushes as well as burning bushes are planted around the new addition.

My husband built the retaining wall at the end of and along the sidewalk. We bought a couple of loads of dirt to fill in between the sidewalk and the remaining part of the old yard. We have worked a couple of summers on getting grass to grow in the front yard.

I compare my planting style to the way I make quilts. I start a quilt off with a design or pattern; I select fabric of different colors, values, and textures; sew pieces of fabrics into blocks; arrange the blocks until I am pleased with the design; and sew it all together.

I start a garden by rototilling or otherwise preparing the bed; buy a bunch of plants of different sizes, colors and textures; arrange the plants until I am pleased with the design; and plant them in the ground.

I hope y’all (that is Texas speak) enjoy our gardens. I am sure that as long as we live here, we will continue to grow and evolve our gardens into whatever they are supposed to be.
weather. On a personal reflection note, in my garden some of the most badly damaged shrubs and even the prized Japanese maple seem to be recovering. These plants may not look so lovely this year, but they seem to be rebounding during these last few weeks. Some established shrubs are growing a new set of leaves jutting from the dead ones. Perhaps the moral of the story is to be patient and let Mother Nature take her course. And as basketball coaches and gardeners always say, “Just wait until next year!”

Volunteer at the Wonder Garden

The next time that you are downtown, stop by and visit the Wonder Garden adjacent to Wonder Lab. It is in full bloom new, filled with an amazing variety of shrubs and perennials. There is also a small veggie plot and a waterfall. This is the second year a faithful troop of MG volunteers (Barb Cappy, Mary Jane Hall, Mike and Cheryl Engber, Jackie Gilkey, Liz Brown, Rosemary Dever, and Nancy White) has assisted the Wonder Lab staff with this project, overseeing pond maintenance, tree care, perennial division and pruning, bulb transplanting, and creation of a veggie planting area. Wonder-Lab recently featured the work of MG volunteers in their newsletter. Call Jeanne Gunning at 337-1337 to volunteer. This summer, family groups of helpers would be most welcome. Volunteer hours are available for any work done at the Wonder Garden, and the work schedule is flexible.

May General Meeting

A large crowd of Master Gardeners and their guests attended the May general meeting held at Karst Farm Park. President Marilyn Brinley introduced the new intern class. We welcomed them into our energetic and busy group. Carol Cobine provided information about volunteering at the MG booth at the Monroe County Fair, and Mary Hawkins reported on the next big event on our calendar, the MG Garden Tour and Picnic. Preston Gwinn gave a review of the volunteer opportunities at the Indiana State Fair. Mary Jane Hall led a discussion of the proposed bylaw changes. The hospitality committee, Cindy Benson, Dale Calabrese, Barb Cappy, Mary Jane Hall, Ann McEndarfer, and Peggy Rees-Krebs, provided a wide array of refreshments. Members participated in a rousing plant exchange until dark, with all plant materials finding new homes.

July General Meeting, Rain or Shine; Win a Scholarship to State MG Conference

The next general meeting is scheduled for July 17, when Marsha Trowbridge will be our leader starting at 6:00 p.m., rain or shine, at the Demonstration Garden at the Monroe County Fairgrounds. We will ready this plot for the County Fair. The garden is located inside the fairgrounds at the southwest corner, just to the left of Gate 3 on Airport Road. Marsha has a group who have done lots of work there, but in July we will all have an opportunity to participate in the final pre-fair touches. Bring your own gloves, hand tools, and rakes. This is a great opportunity to gain some volunteer hours and participate in a drawing to win one of two scholarships worth $120 each to attend the Purdue Master Gardener State Conference, September 27-29, in Evansville. Water will be provided. We will vote on the proposed MG by-law revisions during a brief business meeting before working in the garden.

A Garden Tip from Helen

Before you go out in the garden to weed in spring or early summer, find a half-dozen empty, plastic, small pots and fill each half-full with soil. Tuck these pots, stacked Leaning-Tower-of-Pisa style, under your arm and carry them to the spot where you plan to start weeding. Then as you weed and come upon volunteer plants that you’d like to keep, just lift out plants and place them into prepared pots. Anticipating that you’ll find volunteers and preparing first with half-filled pots saves time and energy. How many times have you found a plant you’d keep if it were not too much trouble to round up a pot and some soil? Prepare pots first, and you’ll have lots of new plants to share!
A Great Little Book on Irises by M. Susan Osborne


In their 96-page book, Theodore James, Jr. and Harry Haralambou reveal everything that you need to know to successfully grow irises. The text is abundantly illustrated with 63 glorious photographs of the many iris varieties – bearded, beardless, and bulbous. The comprehensive volume offers in-depth discussions of the varieties of iris, great detailed tips on how best to grow them, and a profusion of information about planting, caring for, cutting, and combining them with other plants.

The table of contents includes five simple chapters which include the history of irises, selecting irises, growing irises, irises in the landscape, and irises indoors. A great pencil drawing of the anatomy of the bearded iris begins this book which offers a quick glimpse of an iris’s major components.

The chapter, Irises in History, reveals the earliest iris ever grown can be dated back to 7000 BC. Did you know that these captivating flowers are named after Iris, the Greek goddess of the rainbow? And during the Dark Ages and on into the Middle Ages, the iris became the symbolic signature of France and later became known as the fleur-de-lis and to this day, is the city symbol of New Orleans. I found the history to be quite interesting as well as educational.

However, Chapter Two, Selecting Irises, which focuses on bearded, beardless, and bulbous irises, is the book’s foundation. The flowers, when in bloom, arrive in every color of the rainbow, but also come in a combination of colors and patterns. The foliage is spear-like, semi-evergreen, and grows in fan-shaped clumps. Bearded iris varieties include miniature dwarf, standard dwarf, intermediates, miniature tall, border bearded, and tall bearded. Beardless varieties include Siberian, Japanese, Spuria, and Louisiana irises. Bulbous varieties, which grow from bulbs, not gnarled rhizomes, are Iris Danfordiae and Iris Reticulata and Dutch and Spanish Irises. A variety and description is included with each section of iris varieties and wonderful (and I emphasize wonderful!) photographs. The photography is so great that it is hard to select which variety would be your favorite.

Chapter Three, Growing Irises, offers great tips on how to select a plant site, plant the rhizomes and/or bulbs, fertilize, care and maintain, recognize pests and diseases, and divide and transplant.

Chapter Four, Irises in the Landscape, discusses effective color combinations and companion plants for the different seasons as well as use in outdoor containers. Irises Indoors is the focus of Chapter Five discusses how to force bulbous irises and how to properly cut irises. The book is well-written and quick to read. I found the text to be full of very helpful and informative information, and engaging.

The book’s introduction states that if the rose is often called “Queen of the Garden”, then the iris must be king. Second to the rose in popularity in the United States and Britain, irises are among the most beloved of all garden plants. Easy to grow and maintain, irises bloom even when neglected, offer a sensual fragrance, come stunning colors and shapes, are disease resistant and pest free, and most important, provide a dynamic garden spectacle. Irises are a near-perfect plant for today’s busy gardener, beginner gardener, armchair gardener, and anyone who wants to grow one of America’s favorite flowers. I hope if you have an opportunity to read this concise and informative book that it will inspire you to have an iris garden of your very own.

**Volunteer Opportunity**

By Amy Thompson

Monroe County United Ministries (MCUM) is seeking a volunteer with greenhouse experience to help develop projects for children involved in the MCUM daycare program and to assist with greenhouse operations. If you are interested, contact MCUM Volunteer Coordinator Cliff Edens at 339-3429.
Although the final results have yet to come in, I strongly suspect that one of my beautiful trees that I so care-fully planted eight years ago is dying. These past couple of years I noticed that the leaves were sparse, smaller and curled. In contrast, its brother, an identical tree planted at the same time that sits at the opposite corner of the house, looks positively radiant.

I was lucky enough to find two trees that seemed to be just what I was looking for: medium height and spread, fragrant white flowers in the spring and vibrant green foliage that turns to a gorgeous deep purple come early June. This was a new tree to me – *Prunus Virginiana*, or Canada Red Chokeberry. Depending on how you look at it, the fall foliage is spectacular also. It turns a deep red before the leaves abruptly drop all at once to the ground. No worries about when to rake these leaves.

Unfortunately, a year after I planted these two trees, along with a white dogwood to go with the existing redbud tree we inherited when we bought our house, the redbud suddenly died. That happened to be the year I was going through the Monroe County Master Gardener intern class, and I was able to identify the culprit: Verticillium wilt.

Once that prognosis was confirmed by a former extension agent, I was confronted with the problem of finding a resistant tree to replace the dearly deceased. The only tree that would fulfill my particular requirements was another dogwood tree. Thus, I chose a pink dogwood to pair with the white dogwood that had been planted to offset the redbud. I think Murphy’s Law figures in here somehow.

In my search for answers and solutions, I found that no cure exists for Verticillium wilt, a fungus that lives in the ground. And like other things in life, you either have it or you don’t. Once a plant falls victim to the fungal disease, nothing can be done. The pathogen can survive in the soil for years and many plants may seem to thrive unaffected. Of course, as with any living being, the weakened and susceptible organisms are the first ones to fall victim.

As the disease is systemic in nature, the infection moves freely throughout the plant, and decline of the general health of the plant is soon noticed. Leaves emerge smaller than normal and are often yellowed or scorched. Entire branches die out and heavy seed crops may unexpectedly appear. If you see this problem, contact your Extension Office Agent, armed with the physical evidence, so that he or she may help to correctly identify your problem.

The infected branches of the plant show a definite streaking of the vascular tissue or wood. As the fungus moves through the plant, the vascular system is compromised and the plant health suffers, as the nutrients needed are unable to move freely throughout the tissue. The tree or shrub may die back in sections, slowly over time, or the plant may suddenly die, leaving the homeowner in shock at the unexpected demise of a cherished, and often expensive, plant.

It must be noted that fungicides are not effective against this disease and that treating the soil is also not a viable option. So what is the beleaguered homeowner to do? The first step is to be armed with knowledge. Knowing that these conditions exist in one’s garden, the wise gardener works around the condition and searches for plants that have a very real chance of resisting this pernicious disease. In the meantime, tender loving care can be given to the afflicted plant and sufficient water given in order to avoid the stresses that drought places on an already weakened plant. While 100 percent recovery might not be possible, a temporary reprieve might be. Being the planner that I am, I will research possible replacements in the event they are needed.

In the meantime, certain safeguards need to be observed as the gardener waits for the beloved plant to die. Any trimmings from the plant need to be discarded in the trash as composting would only serve to spread the disease. All tools that have come into contact with the infected plant or any plants near the afflicted plant need to be sanitized each and every time they are used. This is an important, if often overlooked, part of everyday gardening procedures.

As with all things that deal with life, the outcome is uncertain, but we must continue to hope for the best. As a precaution, here is a list of trees and shrubs that are susceptible to Verticillium wilt:

(continued on page 11)

*The Deadly Secret in the Soil*

By Marilyn Brinley
<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Jobs</th>
<th>Contact</th>
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<tr>
<td>State Fair Purdue Education Booth</td>
<td>August 12</td>
<td>Educating fairgoers</td>
<td>Preston Gwinn, 876-2999</td>
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<td>Monroe County Fair</td>
<td>July 22-29</td>
<td>various</td>
<td>Esther Minnick, 876-4523; Diana Young, 339-0040; Carol Cobine, 333-8314; Mary Jane Hall, 824-2762</td>
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<td>Hilltop Garden &amp; Nature Center</td>
<td>year around</td>
<td>various</td>
<td>855-2799</td>
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<td>Templeton Garden Project</td>
<td>spring/fall</td>
<td>teaching children</td>
<td>Nancy White, 824-4426</td>
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<td>MG Demonstration Garden</td>
<td>seasonal</td>
<td>various</td>
<td>Marsha Trowbridge - 876-1493</td>
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<td>T. C. Steele SHS</td>
<td>seasonal</td>
<td>various</td>
<td>Steve Doty, 988-2785</td>
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<td>Cheryl’s Garden</td>
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<td>various</td>
<td>Larime Wilson, 333-9705</td>
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<td>Flatwoods Park Butterfly Gardens</td>
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<td>various</td>
<td>Cathy Meyer, 349,2800</td>
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<td>MCMGA Horticulture Hotline</td>
<td>year around</td>
<td>inquiries and research</td>
<td>Amy Thompson, 349-2575</td>
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<tr>
<td>MCMGA Speakers Bureau</td>
<td>year around</td>
<td>various</td>
<td>Amy Thompson, 349-2575</td>
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<td>MCMGA Newsletter</td>
<td>year around</td>
<td>writing, stapling, labeling</td>
<td>Helen Hollingsworth, 332-7313</td>
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<td>MCMGA Web Site</td>
<td>year around</td>
<td>various</td>
<td>Barb Hays, 332-4032</td>
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<tr>
<td>MG Program Committee Member</td>
<td>year around</td>
<td>plan MG programs</td>
<td>Ann McEndarfer, 334-1801; Nancy White, 824-4426</td>
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<td>Middle Way House</td>
<td>seasonal</td>
<td>various</td>
<td>Clara Wilson, 333-7404</td>
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<td>Wylie House</td>
<td>year around</td>
<td>various</td>
<td>Sherry Wise, 855-6224</td>
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<td>Bloomington Hospitality House</td>
<td>year around</td>
<td>educate seniors</td>
<td>Rene Thompson, 353-3000</td>
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<td>Mother Hubbard’s Cupboard</td>
<td>year around</td>
<td>education, resource</td>
<td>Libby Yarnell, 355-6843</td>
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<tr>
<td>WonderLab Garden</td>
<td>2 times monthly</td>
<td>various</td>
<td>Nancy White, 824-4426</td>
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<td>Garton Farm</td>
<td>year around</td>
<td>Assess grounds, develop plans</td>
<td>Michael Bell, 336-6141</td>
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</tbody>
</table>

PLEASE WEAR YOUR NAME BADGE WHEN VOLUNTEERING.
This past week, a client brought in to the Owen County CES office what most would consider to be some specks of dirt. However the client stated that they were ticks that had attached themselves before being discovered. Under the microscope, these were tiny nymph stage deer ticks. It is scary how small these little critters are at one to two millimeters in size, considerably smaller than the American dog tick that is most common in this area. This was the first time I personally had seen the deer tick.

Deer ticks are the carriers of Lyme disease and are more prevalent in the northeast US and upper Midwest, they are more common in northwest Indiana than the local area. However, according to Dr. Jim Howell, Indiana State Department of Health, about two-thirds of Indiana counties have reported finding deer ticks. Also it should be noted that all stages (larva, nymph and adult stages) can be carriers transmitting Lyme disease. There are cases of Lyme disease in Indiana so this tick is of concern to people in the area. Individuals with redness around a white or clear center should see their physician to consider Lyme disease. These bulls-eye infections will ultimately become larger upward of two inches to covering a significant area of one’s back, for example. In order to become infected with Lyme disease, a tick must be attached at least 24-36 hours. Contrary to popular belief, neither the Indiana Department of Health nor local health departments conduct testing of any ticks for disease. According to Dr. Howell, regular testing used to occur, but funding for testing ceased so there is no longer testing available.

Dr. Howell commented that most people who acquire Lyme disease never realize that a deer tick had attached to their body. It is important to be able to identify ticks. Visit www.ent.iastate.edu/imagegal/ticks/ to help with identification. The Center for Disease Control (CDC) website www.cdc.gov is a good place to learn about diseases that ticks can transmit. Once there, type ticks where the site allows you to search.

The more common American dog tick is capable of carrying and spreading Rocky Mountain Spotted Fever (RMSF) to its hosts. This type of tick must be attached for four to six hours to transmit RMSF to the host. In the spring and early summer, these ticks will hang out on bushes, tall weeds and grass and attach to passing animal or people hosts. Lone star ticks and deer ticks have been found occasionally in recent years in wooded areas. Lone star ticks are most likely found in southern Indiana wooded areas, particularly where there are high deer populations. These ticks are thought to be potential carriers of RMSF, tularemia, and Lyme disease, though to a much lesser degree than other primary tick carriers. The brown dog tick is mostly an indoor pest. The name comes from the fact that dogs are the primary host, and this tick is found near and in bedding areas particularly.

How can you avoid ticks? One suggestion is to avoid tick infested areas but if you are like myself, I am willing to tolerate pulling several ticks from my clothing and skin in an effort to find mushrooms or to pick black raspberries in June and black berries in late July and early August. Personal protection includes wearing light colored clothing, long pants and a long sleeve shirt so that ticks may be spotted and removed more quickly when they latch onto clothing. It is also important to tuck in shirt tails and even pull socks over pant cuffs if truly trying to protect from a tick attaching to the skin. Insect repellent containing DEET is most effective. Also read the label as there are use restrictions for infants and young children on many products. It is best to periodically do a full body scan for ticks and certainly when returning inside. Pets should also be checked before allowing them inside during tick season. Ask your veterinarian regarding the many products for pet tick control.

Control and prevention measures outdoors include clearing overgrown and heavy vegetation near play areas of the yard. Residual insecticides like malathion and stirofos (Rabon®) can be used where infestations are occurring along pathways, trails, road or walkways. Treatments near ground level can be made on grass, shrubs, trees and wooded edges. Always allow insecticides to dry prior to reentry by others and follow label information. Other insecticides that may be available include Ficam-W®, Deltic®, Tempo®, Suspend®, and Demand®. Some of these latter insecticides may only be available to professional pesticide applicators. Pyrethrins and carbaryl (Sevin®) are available for indoor treatment when dealing with indoor brown dog ticks. Revised in January 2005, Purdue publication E-71 entitledTicks – Biology and Their Controlprovides more specifics and lists a six-step process for removing a skin attached tick. The only reason to keep a tick after it is removed is to help identify it should the person become sick at some point.
MG INFORMATION BOOTH AT MONROE COUNTY FAIR

By Carol Cobine

The Monroe County Fair is July 21-28 at the Monroe County Fairgrounds. During the fair each year, Master Gardeners sponsor an information booth at which we distribute gardening information, answer questions, and represent our group. The MG booth will be staffed beginning Monday, July 23, 6:00-9:00 p.m. and on Tuesday through Friday, July 24-27, 1:00-9:00 p.m. Shifts are two to two and a half hours. Call Carol Cobine, volunteer coordinator, if you signed up to volunteer and have questions.

A GARDEN TIP FROM HELEN

We can help preserve natural resources for future generations by preventing erosion by covering bare soil with plants or mulch and by terracing and planting ground covers on steep slopes; using pesticides and herbicides sparingly, correctly, and as conservatively as possible; using slow release fertilizers which reduce the chance that nutrients will end up in sewers, wells, or in streams, rivers, and underground water table; building a compost pile by recycling our kitchen and yard waste; selecting drought tolerant plants and native plants; using mulch, such as ground up leaves, compost, shredded bark, straw, or pine needles, to hold moisture in soil; constructing rain gardens to keep water clean and to control run-off; reducing fertilizers on lawns to prevent fertilizers leaching into water system; and watering only when needed.

VERTICILLIUM WILT (continued from page 8)

<table>
<thead>
<tr>
<th>Ash</th>
<th>Current and Gooseberry</th>
<th>Maple Oak, Pin and Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azalea</td>
<td>Dogwood*</td>
<td>Plum</td>
</tr>
<tr>
<td>Barberry, Japanese</td>
<td>Elder</td>
<td>Redbud</td>
</tr>
<tr>
<td>Boxwood, Korean</td>
<td>Elm</td>
<td>Rose</td>
</tr>
<tr>
<td>Buckeye, Ohio</td>
<td>Honeysuckle</td>
<td>Russian Olive</td>
</tr>
<tr>
<td>Catalpa</td>
<td>Lilac</td>
<td>Serviceberry*</td>
</tr>
<tr>
<td>Cherry, other stone fruits</td>
<td>Linden*</td>
<td>Spirea</td>
</tr>
<tr>
<td>Coffee Tree, Kentucky</td>
<td>Locust, Black</td>
<td>Sumac</td>
</tr>
<tr>
<td>Cork Tree</td>
<td>Magnolia</td>
<td>Viburnum</td>
</tr>
</tbody>
</table>

*Plants listed with an asterisk may appear in both the susceptible and resistant species list, depending upon the cultivar and the strain of the fungus present.

Trees and shrubs that are resistant to Verticillium wilt:

<table>
<thead>
<tr>
<th>Apple</th>
<th>Hawthorne</th>
<th>Mulberry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arborvitae</td>
<td>Hickory</td>
<td>Oak, White and Bur</td>
</tr>
<tr>
<td>Beech</td>
<td>Honeylocust</td>
<td>Pear</td>
</tr>
<tr>
<td>Butternut</td>
<td>Hophornbeam</td>
<td>Pine</td>
</tr>
<tr>
<td>Dogwood*</td>
<td>Juniper</td>
<td>Poplar</td>
</tr>
<tr>
<td>Fir</td>
<td>Larch</td>
<td>Serviceberry*</td>
</tr>
<tr>
<td>Ginkgo</td>
<td>Linden*</td>
<td>Spruce</td>
</tr>
<tr>
<td>Hackberry</td>
<td>Mountain Ash</td>
<td>Sycamore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walnut</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Willow</td>
</tr>
</tbody>
</table>

Sources:
2007 Regents of the University of Minnesota, Cynthia I. Ash, Authors: R. J. Sipes, Virginia Tech and Mary Ann Hansen, Virginia Tech, publication number 450-619
www.extension.umn.edu/distribution/horticulture/DG1164
www.ohioline.osu/hyg-fact/3000/3053
www.ext.vt.edu/pubs/plantdiseasefs/450-619/450-619
THIRD ANNUAL MASTER GARDENER GARDEN WALK ON JUNE 16, 4:00-7:30 P.M.

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