A few thoughts about training hours, education hours, and records

By Amy Thompson

Training Hours

Activities where you learn something by attending lectures, workshops, or meetings that contain an educational component count as training hours, aka continuing education. Training hours for these events should be the actual educational time, not the social time.

Usually education hours include time spent on topics focused on horticulture; however, programs that develop leadership or teaching skills can also potentially count.

Training hours can come from a wide variety of sources; it is not just limited to local Master Gardener programs. Some examples of potential sources of training hours include statewide and regional Master Gardener programs, IU continuing studies, Bloomington Parks and Recreation, Garden Club meetings, Hilltop Garden and Nature Center, and Wylie house.

Formal garden tours where you are led by a tour guide count as training hours; informal tours where there is not a formal exchange of information do not (i.e. a tour of White River Gardens with a guide discussing varieties and their specific requirements does count, while visiting the gardens on the Bloomington Garden Walk does not).

Training hours are cumulative; you can begin earning training

(continued on page 3)
Member news

By Nancy White

A hardy group of members met in the Demo Garden on July 17, under the supervision of one of our garden coordinators, Jeannie Cox, to weed, clean up, and spruce up for the Monroe County Fair. The recent drought has caused some damage, but fairgoers will still see some interesting shade plants, herbs, and perennials when they tour the garden.

Susan Sachtjen awarded scholarship to state conference

Because of schedule conflicts with our first winner in the drawing for a scholarship to the State Master Gardener Conference on October 4-6 in Noblesville, another drawing was held at the July 17 general meeting at the Demo Garden. Congratulations to Susan Sachtjen, who will attend the conference. Information about registration, sessions, and speakers is available online. All Master Gardeners are invited to attend this conference.

MCMGA provides grants to non-profits

In the May issue of Harvest Report, the newsletter from Mother Hubbard’s Cupboard, the MCMGA was thanked for providing funding to maintain the 2012 Community and Youth gardening programs. Our grant program is helping eight worthy non-profit agencies this growing season.

Thank you, Debby Harding and Kathy Baxter

Many thanks to Debby Harding and Kathy Baxter who have agreed to help out at the Demo Garden in the absence of Barbara Hays who has been ill.

September board meeting is August 27

Because of the Labor Day holiday, the September Master Gardener board meeting will be held on August 27. Be sure to mark it on your calendar.

Web Castings taking a sabbatical

We are sorry to hear that Karen Sparks has decided not to continue her column, Web Castings, in the monthly Roots and Shoots. We will miss the information and ideas she presented to us, and we thank her for her contribution to our newsletter. Maybe you might be thinking of following her lead and writing a short column regularly or just once? New contributors are always welcome. Contact journalist Helen Hollingsworth for more information.
A few thoughts about training hours, education hours, and records (continued from page 1)

hours from the time you enroll in the Master Gardener Training program. Travel time to training events does not count.
If you have any questions about whether a particular activity counts, please contact me!

Volunteer Hours
Volunteer activities should be in line with the purpose of the Master Gardener program and should have an educational outcome.
Community beatification projects benefit us all but will not count as volunteer hours unless there is an educational component included.
Volunteer work must be UNPAID. However, you can accept reimbursement for expenses or for travel expenses, and you may also accept a donation to the Monroe County Master Gardener Association.
If you work in the horticulture industry, please do not turn in any hours at your place of employment without prior approval.
Master Gardeners are only to advise regarding home horticulture, NOT commercial clientele. All commercial growers should be referred to the appropriate Purdue Extension staff.
Work in public gardens such as Hilltop, Wylie House, WonderLab, and the MG demonstration garden where the aim of the garden is to increase public awareness and understanding of horticulture count as volunteer hours.
Advice to neighbors and family members during “over the back yard fence” time does count as does time researching answers to questions.
Travel time to volunteer activities can count, but this should be a minor part of your volunteer activities.
If you have any questions about if a particular activity counts, please contact me!

Records
A Master Gardener Activity Report is available at www.mcmga.net. PLEASE use this form to report your hours!
Please keep a copy of your Activity Reports for your records.
Although the annual commitment of 12 volunteer hours and 6 educational hours runs on the calendar year, I would appreciate having hours reported more frequently. My reporting year for Purdue follows the federal fiscal year from October 1 through September 30.
If you have questions about certification, remaining an active Master Gardener, and advancing to higher levels of certification, please refer to the October 2006 Roots and Shoots newsletter which can be found at http://www.mcmga.net/newsletters/Oct06.pdf.
Tomatoes slow to ripen?  
Submitted by Amy Thompson

The hot, dry weather we have had recently not only interferes with flower pollination but also can affect how quickly fruit matures. The best temperature for tomato growth and fruit development is 85° to 90°F. When temperatures exceed 100°F, the plant goes into survival mode and concentrates on moving water. Fruit development slows to a crawl. When temperatures moderate, even to the low to mid 90s, the fruit will ripen more quickly.

Tomato color can also be affected by heat. When temperatures rise above 95°F, red pigments don't form properly though the orange and yellow pigments do. This results in orange fruit. This doesn't affect the edibility of the tomato, but often gardeners want that deep red color back. Though you can't change the color of tomatoes that have completely ripened, you can pick them when they are just starting to turn and have them ripen in cooler temperatures (75° to 85°F is best). Such tomatoes will develop normal coloration.

Bitter cucumbers  
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.
Master Gardeners prepare Demo Garden for visitors

By Evelyn Harrell

August is upon us, and the Monroe County Fair will be in full swing when you read your August Roots and Shoots. Hopefully the Master Gardener Demonstration Garden is proving to be a rewarding experience for visitors. It will have survived the extreme heat and drought and will have benefitted from the considerable assistance of hardy Master Gardeners who gathered on the evening of July 17 to weed, define flower beds, and lay mulch for that polished look we all seek. Mary Jane Hall reported that everything went well for the clean-up, despite the heat. Refreshing snacks and cold water were provided by Mary Jane Hall, Dorothy Cole-Kiser, Kay Cunningham, Carol Reynolds, and Sylvia Smith. They deserve a round of applause for coming through under trying circumstances!

Next general meeting is Tuesday, September 25

For your calendar: the next general meeting is Tuesday, September 25 at 6:30 p.m. at the Extension Office. Our speakers are Moya Andrews, presenting Focus on Flowers for Fall, and Anita Barcalente speaking on Hydrangeas: A Short History and Cultivation Practices in the Care of the Genus. It’s almost certain that both speakers will be sharing advice on coping with the drought and hot conditions that have stricken this area and may be with us for some years to come. Refreshment committee members for the September meeting are Penny Austin, Sandy Belth, Mary Hawkins, Mary Hoffman, Ann McEndarfer, and Dot Owen.

Got ideas for field trips?

Ideas for field trips this year have dried up as the gardens have dried out. If you would like to help us locate new field trip sites to enjoy for 2013, please contact me at ear4841@comcast.net. We will meet as a committee in September or October for a brainstorming session. All such committee work qualifies for volunteer hours.

Hats off! New badge!

Susan Eastman, Silver Level

Congratulations!
Need some volunteer hours?

By Nancy White

We will be organizing our Saturday Bloomington Farmers Market booth for September and October. If you would like to help with a Saturday morning at the market anytime during the fall, contact Nancy White.

The market is lots of fun, and our booth provides opportunities to answer gardening questions from the public and also to publicize our upcoming winter intern class.

Gardens and a mystery—a winning combination

By Helen Hollingsworth

Gotta love an English garden mystery with lines like these:

“Next time you’re in Oxford, stop by and say hello.” He winked. “I'll show you a few of Morse and Sergeant Lewis’s hangouts.”

And these lines:

“He’s almost certainly referring to Rosa chinensis var. spontanea. It’s an ancient species of wild rose. Its age is unknown, but could date from at least the eleventh century B.C. one of the ancestors of most of today’s rose cultivars—certainly the hybrid teas and floribundas. It may well have been the reason for the expedition in the first place. By all indications, an expedition that went wrong.”

What went wrong is the core of the mystery in The trail of the wild rose by Anthony Eglin.

Anthony Eglin, born in England and now a resident of Sonoma, California, is a writer of English garden mysteries who worked in advertising for many years before indulging full time his passion for gardening and writing. He’s a member of the American Rose Society.

These five English garden mystery titles by Anthony Eglin are available at the Monroe County Public Library: The blue rose, 2004; The lost gardens, 2005; The water lily cross, 2007; The trail of the wild rose, 2009; and The garden of secrets past, 2011.
Register for 2012 State Master Gardener Conference

The 2012 Purdue Master Gardener State Conference, *All Things Hortus*, hosted by Purdue Extension-Hamilton County and Hamilton County Master Gardener Association at Hamilton County Fairgrounds, Noblesville on October 4-6, 2012, is now open for registration. Registration deadline is September 20, 2012 but to save, register by August 20, 2012.

Purdue Extension Master Gardeners at all levels (Intern, Master Gardener and Advanced Master Gardeners) are invited to attend. Participants can earn up to 18 hours of Advanced Master Gardener Educational Hours for the basic conference plus 5 additional hours if you take an optional pre-conference tour or workshop (additional fee).

The registration fee includes some meals, social events, break refreshments and a conference binder with workshop information and local attractions. There are additional opportunities to register for optional tours and activities on Thursday with additional fees.

For highlights, more information, and a registration form that can be downloaded, see [http://209.43.115.19/2012-master-gardener-state-conference-2/](http://209.43.115.19/2012-master-gardener-state-conference-2/).

A fall education seminar

By Nancy White

Paul James, “The Gardening Guy” and host of HGTV program, *Gardening by the Yard*, will be the featured speaker at a gardening conference sponsored by the Southwestern Indiana Master Gardeners Association. Details of the conference are below. For more information contact Jim Bratt, Evansville, at 812-963-5577.

Date: Saturday, October 20, 2012, 7:30 a.m.—4:00 p.m.

Place: Casino Aztar Conference Center, Evansville

Registration: $42 (includes all sessions, breakfast and lunch)

Hotel: accommodations available at the Casino

Other sessions: pest management, healing herbs for the home garden, low maintenance roses, regional native plants, what’s new for 2013?
Register online for the 2013 International Master Gardener Conference

The 2013 International Master Gardener Conference is garnering a lot of attention. To date we have 414 folks registered for the cruise ship. Actual educational/seminar and tour information will be available September 1, 2012. We have our keynote speakers set, and most of our seminar topics and speakers confirmed. We are working on finalizing tour options. There will be a $200 additional fee for conference registration—but stay tuned for your choices.

$350 per person or $700 per room will hold the cabin of your choice. To register, log onto http://www.uaex.edu/imgc2013/default.htm. No credit card information is put online, but once you register, you will get a call back, usually within two weeks, from the conference staff at Washington State to get the credit card information, and answer any questions you have. You will need a credit card to pay; checks are not accepted. If you don’t have a credit card, you can purchase a Visa or MasterCard that you preload with the amount of money you want to spend. Additional amounts can be paid monthly or you can pay it all off at once—it is your decision, as long as your bill is paid in full prior to June 24, 2013. Call or email Michelle Breining how much you want charged to your account, and when you want it charged. If you choose to put your credit card on auto pay, you will automatically be charged your full balance on June 24, 2013.

Washington State Conferences can also give you airfare quotes, or you can do it on your own. Airfare is usually available one year prior to your flight—so again, by September, 2012, it should be available. If you indicate on your registration you are interested in airfare they will contact you and help you with your airfare.

We do have participation from across the country, but we want Master Gardeners in all counties and states to know what is happening, so they have the opportunity to join us.

**General Meeting**

*September 25, 6:30 p.m., Extension Office Meeting Room*

*Program: Focus on Flowers for Fall, presented by Moya Andrews and Hydrangeas: A Short History and Cultivation Practices in the Care of the Genus, presented by Anita Bracalente*

*Education hours: 2*
# Volunteer opportunities

Compiled by Nancy White

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<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Jobs</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Hilltop Gardens</td>
<td>year around</td>
<td>various</td>
<td>Charlotte Griffin, 345-8128</td>
</tr>
<tr>
<td>MG Demonstration Garden</td>
<td>seasonal</td>
<td>various</td>
<td>Bethany Murray, 339-8876 <a href="mailto:bethany.murray@gmail.com">bethany.murray@gmail.com</a></td>
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<td>Bloomington Community Orchard</td>
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<td>Stacey Decker, <a href="mailto:getinvolved@bloomingtoncommunityorchard.org">getinvolved@bloomingtoncommunityorchard.org</a></td>
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<td>Cheryl’s Garden at Karst Farm Park</td>
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<td>design and maintain</td>
<td>Nancy Fee, 332-1940</td>
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<td>T. C. Steele SHS</td>
<td>seasonal</td>
<td>various</td>
<td>Davie Kean, 988-2785</td>
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<td>Flatwoods Park Butterfly Gardens</td>
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<td>various</td>
<td>Cathy Meyer, 349-2575</td>
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<tr>
<td>MCMGA Horticulture Hotline</td>
<td>year around</td>
<td>inquiries and research</td>
<td>Amy Thompson, 349-2575</td>
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<td>MCMGA Speakers Bureau</td>
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<td>various</td>
<td>Amy Thompson, 349-2575</td>
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<td>MCMGA Newsletter</td>
<td>year around</td>
<td>write articles</td>
<td>Helen Hollingsworth, 332-7313</td>
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<td>MCMGA Web Site</td>
<td>year around</td>
<td>various</td>
<td>Barbara Hays, 332-4032</td>
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<td>MG Program Committee Member</td>
<td>year around</td>
<td>plan MG programs</td>
<td>Evelyn Harrell, 3390572 Jeff Schafer, 325-3130</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>Mother Hubbard’s Cupboard</td>
<td>year around</td>
<td>education, resource</td>
<td>Stephanie Solomon, 334-8374</td>
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<td>WonderLab Garden</td>
<td>2 times monthly</td>
<td>various</td>
<td>Nancy White, 824-4426</td>
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<tr>
<td>Hoosier Hills Foodbank</td>
<td>year around</td>
<td>various</td>
<td>Nicole Richardson, 334-8374</td>
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Drought conditions wreak havoc on trees and shrubs

By Janna Beckerman and Gail Ruhl, Botany & Plant Pathology, Purdue

Drought conditions are wreaking havoc on numerous native and non-native trees and shrubs throughout Indiana. Many evergreens (white pine, Colardo blue spruce, fir, arbovita), deciduous trees (maple, ash, oak) high-maintenance ornamentals (Japanese maple, Japanese stewartia, rhododendron), and even normally low maintenance plants like Spirea are exhibiting leaf scorch, dieback and in some cases entire plant death.

Normally, established, native plants have evolved to survive seasonal and annual variations in water supply, however even these species are exhibiting symptoms of stress in response to the severity of the drought conditions. Drought damage develops in plants when dry soils prevent roots from absorbing the moisture necessary to replace water lost during transpiration (a process that a plant needs in order for photosynthesis to occur), resulting in stress. Under continued stress, leaves wilt, turn yellow to brown at the tips and margins, curl, or show all of these symptoms and die. Stressed plants are predisposed to infection by pathogens, attack by insects, and additional injury from other site and environmental factors.

The first and only obvious indication of drought appears in the leaves. Symptoms include green leaves that wilt and turn brown; severely stressed deciduous plants may drop all their leaves. In conifers, needles turn yellow or brown and drop and entire branches will die back. Due to the waxy, protective layer on conifer needles, these symptoms may not develop until many months after the initial stressful event. By the time these symptoms develop, it may be too late to save the tree or shrub. Note: drought symptoms on evergreens should not be confused with natural autumn shedding of older, inner needles, which is also occurring now.

Even the most drought tolerant plant will succumb to drought if recently transplanted. Transplanted plants are at greatest risk of drought damage having lost significant root mass, preventing leaves from obtaining needed moisture. Woody plants within three to five years of transplanting are most susceptible to drought damage as roots have yet to establish fully.

The key to managing drought damage is prevention: Deep watering during extended dry periods throughout the year, including winter months through early spring when temperatures remain above freezing for prolonged periods protect plants, particularly evergreens, from drought.

To minimize the impact of drought, mulch around the base of the tree, taking care to avoid “mulch volcanoes,” and keeping the mulch away from the tree’s stem. Two to four inches of mulch increases soil moisture retention, prevents weed development and competition, and minimizes the likelihood of lawnmower and weed whip injury. However, more than four inches of mulch actually prevents roots from obtaining necessary moisture by blocking rainfall or irrigation. Other techniques to manage drought is to avoid planting shallow-rooted species (ash, sweet gum, silver maple) in areas of low moisture or on sandy soils. Water ornamental trees about once a week to moisten soil 6 to 12 inches deep into the root zone (approximately 1” of water). For clay soils, watering 2 times per week with only 0.5” soil will prevent flooding and allow water to percolate to the root zone.
Plant galls not always harmful
By Rosie Lerner, Extension Consumer Horticulturist, Purdue

Plants often develop bumps or other odd growths that might remind one of a science fiction movie, but there's no need to be alarmed. These unusual appearing growths are called galls and are usually more of a cosmetic problem rather than a health crisis.

The galls themselves are mostly made up of plant tissue, usually as an attempt to recover from insect or disease injury. Galls can be quite small, just a fraction of an inch, or can be as large as several inches long, depending on the plant and cause of injury. Some of the most common landscape plants that develop galls include oaks, maples, hackberries and roses.

Most galls occur on leaf tissue and are caused by insects. Adult insects lay eggs inside the leaf tissue, and either the adult or the developing young insects secretes a growth stimulating substance. Each insect causes a very characteristic gall. Most leaf galls are nothing to be concerned about from a plant health standpoint, although they may be unsightly. However, once the gall appears, the appearance of the current growth cannot be remedied.

Some galls, particularly those that occur on the stems of perennial plants, can be very serious problems. The galls not only disfigure the plants, but can result in eventual death of the plant. These are more likely to be caused by a fungal or bacterial pathogen. Crown gall, which affects euonymus and roses, is an example of a life-threatening gall.

Pruning out affected growth is about all that can be done once the galls appear. Pesticides to prevent insects or diseases from attacking the plants must be applied before injury occurs and the growth stimulating substances occur. For leaf gall-forming insects, insecticides must be applied during the brief week or so period that leaves unfold and fully expand in spring. Unfortunately, other pest cycles are less understood and chemical controls may prove inadequate.

Fortunately, most gall-causers are host-specific, meaning that they each have a preferred plant species. So galls that occur on maple trees, for instance, will not spread to other types of plants in the yard.

For more information on galls of ornamental plants, see the following Web sites.
Purdue publication E-56 Galls on Shade Trees
http://www.entm.purdue.edu/Entomology/ext/targets/e-series/EseriesPDF/E-56.pdf
Purdue publication BP-35 Cedar Galls
http://www.ces.purdue.edu/extmedia/BP/BP-35.html
Purdue PPDL web page - Maple Bladder Galls
http://www.ppdl.purdue.edu/ppdl/expert/Maple_bladder_galls.html
Purdue PPDL web page – Oak Hedgehog Galls
http://www.ppdl.org/dd/id/hedgehog_galls-oak.html
Master Gardener education and volunteer hours up to date? Read Amy’s message on page 1.

Master Gardener calendar

- **Tuesday, September 25**, 6:30 p.m., extension meeting room, MCMGA general meeting, program presented by Moya Andrews and Anita Bracalente

- **October 4-6**, State Master Gardener Conference, Hamilton County Fairgrounds, Noblesville, register by September 20

- **Saturday, October 20**, 7:30 a.m.-4:00 p.m., Ohio Valley Garden Conference, Evansville, Indiana; for information call 812-963-5577