

Roots and Shoots

Volume 30, Issue 7

July 2014

Monroe County Master Gardeners Association

Next general meeting is July 22

By Susan Lovell



Special points of interest:

- ◆Volunteer at the Indiana State Fair with free entry
- ◆You see the damage. Do you know the difference between caterpillars and sawflies?
- ◆Failure to bloom and bud drop are common Rose of Sharon problems. Rosie Lerner wonders why
- ◆It's chigger season. Do you have a plan?
- ◆How much is too much when pruning winter damage?

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Greetings, Master Gardeners! Does anyone else feel our summer is rushing by? It is already time for our July general meeting which will be held at the Demonstration Garden at the Monroe County Fairgrounds on Tuesday, July 22 at 6:30 p.m. You will enter the fairgrounds through Gate 3 off Airport Road, and the garden is on the left.

It is time to prepare the garden for Monroe County Fair visitors, and the agenda for the evening includes a brief business meeting followed by a general work session in the garden. Everyone is asked to bring favorite garden tools useful for trimming and weeding and also your favorite bug spray. Drinks and snacks will be provided by the refreshment committee for the evening, Mary Cusack and Judy Dillon. We could use two or more volunteers to help with refreshments as those working in the garden will be expending a lot of energy and be hot and thirsty. Simple finger foods along with bottled water and/or other drinks are needed for the garden workers.

The work session is a great opportunity to earn volunteer hours and to meet and work with other Master Gardeners. If you are able to help the refreshment committee, you are needed and welcome. Please contact Susan Lovell at smlovell@indiana.edu or call me at 812 339 5914. We hope to see you on Tuesday, July 22 to help make the Demo garden look awesome for Fair visitors.

Monroe County Fair
July 26—August 2
Monroe County Fairgrounds

Member news

By Evelyn Harrell



“Your board members will hold their June board meeting at the Demo Garden, *weather permitting*, to help identify what to tackle first.”

That was the remark in this column’s June issue. You’d think these gardeners would recognize inclement weather when they see it, wouldn’t you? This is how David Dunatchik described it in the minutes of the meeting: “Prediction of rain came true just in time for the Board to gather at the Demo Garden to look at the amount of work needed to make the garden presentable this summer. Capped with a colorful assortment of umbrellas, the board conducted a walk-through....” Towering clouds threatened all afternoon, and skies darkened as the hours went on. Sprinkles started soon after we got there, then the rain picked up, and when umbrellas proved to be inadequate, we ran for cover in the 4-H building to continue the discussion. It was an adventure. Everyone got wet and no one complained. Thank you, board members!

The gathering in the Demo Garden resulted in a plan coming together to tackle the abundance of weedy disarray caused by lots of spring rains. About eight Master Gardeners have taken responsibility for areas of the garden. They can use help. Our email guru, Stephen Anderson, has been sending out requests, and he put it so well: “Regular work sessions are being held on Tuesdays at 3:00 p.m. If you would like to volunteer on other days, please contact Diana Young at young-diana@att.net or 812-339-0040 to help coordinate our efforts. This is an important project which publicly represents the work of our organization to our community—please show your support by helping out.”

Join the fun with fellow gardeners and earn volunteer hours when we meet at the Demo Garden for the July 22 general meeting at 6:30 p.m. Bring your shovels, shears, loppers, gloves, rakes, and other tools. Be sure everything is well marked so your tools make it back home again. The work truly is fun and not like work at all when we all do it together. See Susan Lovell’s article—there will be snacks and cool drinks!

In the meantime, the Purdue Master Gardener State Conference has come and gone. Seven local Master Gardeners attended. One experienced attendee remarked that this was a particularly good conference. To this newbie, it appeared to be very well organized, and the speakers were varied and well prepared. Watch for more information in the August issue about the 2014 conference. Here’s a note for your calendars—the 2015 Conference will be held in Evansville on June 4-6. The Vanderburgh County Master Gardeners gave a presentation that described the excursions and speakers already lined up for next year. Next year’s State Conference promises to be an excellent experience for all.

Volunteer at the State Fair Master Gardener booth

Submitted by Amy Thompson



On Sunday, August 10, 2:00-7:00 p.m., Monroe County Master Gardeners will be manning the Master Gardener booth at the Indiana State Fair in Indianapolis. As at our own county fair, Master Gardeners answer garden-related questions. Materials are on hand, physically and digitally, to assist. If you'd like to participate, contact Jeff Schafer at jeff.schafer1@comcast.net. We will receive a maximum of eight passes, and carpooling may be arranged.

How can tick bites be prevented?

The best way to prevent tick bites is to avoid certain habitats during the peak of tick season. In Indiana, this is usually from early April into July. If you do need to enter an area that is a likely or confirmed tick habitat, wear light-colored clothing, including a long-sleeved shirt tucked into pants and long-legged pants tucked into socks. This will not only help to prevent ticks from reaching your body, it will also enable you to spot any adult ticks on your clothing.

Apply a repellent containing DEET, and consider treating clothing with permethrin, which initially repels and eventually kills ticks that contact clothing, see Purdue Extension publication E-71-W "*Ticks - Biology and Their Control*" (PDF 372KB) and the Centers for Disease Control and Prevention website for additional information on repellents and their correct use. Follow directions for use printed on the product label.

As soon as possible after an outing in tick habitat, remove clothing and conduct a thorough check of it and your body. Male and female adult ticks can wander on a host for up to several hours before they attach. This is why a thorough body check, paying particular attention to areas such as the head, underarm, and groin, can discover adult ticks before they begin to feed. Keep in mind, however, that larvae and nymphs rarely are seen because they are very small and usually translucent. This is why the preventative measures outlined above should be followed.

From <http://extension.entm.purdue.edu/publichealth/insects/tick.html>

An excellent State Master Gardener Conference

By Robin Rothe



As the recipient of the MCMGA board annual scholarship, I attended the Purdue Master Gardener Conference on June 13 and 14 in Indianapolis.

The conference began with lunch on Friday with horticulturist Chris Hansen speaking about new perennial plants for 2014. There were so many that he ran out of time before he finished. I added Sea Heart Brunnera and Citriodora Nepeta, which reportedly smells like lemon Pledge, to my list of new plants to explore.

I attended three workshops on Friday afternoon.

Joseph Tychonievich, plant breeder and author of *Plant Breeding for the Home Gardener*, spoke about the process genetically modifying plants and the reasons for it while attempting to stay clear of the controversial side of the topic.

Joy of Containers, presented by Irvin Etienne, horticultural display coordinator at the Indianapolis Museum of Art, provided a slideshow of container plantings with advice on choosing the right plants for the right container and location.

How Plants Got Their Stripes was a look at how variegation occurs in plants. Variegation is a mutation and as these plants have tissue that is unable to carry out photosynthesis, they are generally weaker than their darker counterparts and end up dying when occurring in the wild. Gardeners seem to love the variety that variegated plants bring to the garden so they continue to be cultivated.

Saturday's conference began with a continental breakfast during which Mary Palmer Dargan, Landscape Alchemist, spoke about designing a timeless garden that provides spiritual restoration and refreshment. She used pictures of her own garden to demonstrate her eight principles of garden design.

Next up was a session entitled *Gardening for Pollinators*. Denise Ellsworth, who directs the honey bee and native pollinator program through Ohio State University, gave a fascinating talk about the different types of bees and how each of their respective hives operate. She provided good ideas for making a garden inviting to pollinators of all types.

The final workshop was *Vegetable Gardens: Then and Now* presented by Carole Michel who was both humorous and informative in providing a plan for successful vegetable gardening. I am pretty sure she said she owns 28 hoes!

The conference ended with lunch and a talk by Tony Avent, owner of Plant Delights Nursery, speaking about how to add year-round color and interest to a garden.

Next year's conference will be held in Evansville and sounds like it will be full of great speakers and interesting topics.

I learned a lot about plants and garden design at the conference and came away with renewed zeal for gardening. Thanks to the Master Gardeners for the generous scholarship for the conference.

It may look like a caterpillar....

By Timothy J Gibb, Entomology Department, Purdue

Sawfly larvae may look like caterpillars, but belong to an entirely different order of insects (Hymenoptera). In fact, sawflies are much more closely related to bees and wasps than they are to butterflies and wasps.



Mallow sawfly
feeding on
hibiscus

The photos shown of Mallow sawfly were taken by John Obermeyer and serve to illustrate a question that we get in the Insect Diagnostic Laboratory quite frequently: *Are these caterpillars or are they sawflies?*

So, how can one tell the difference between a sawfly larva and a caterpillar—especially when both are found feeding on the foliage of trees and other plants?

The answer lies underneath the insect in the form of prolegs. Prolegs are stubby and fleshy, unsegmented legs, usually found in pairs on the third through sixth abdominal segments of caterpillars. These are the structures that help them climb vertical stems or even crawl upside down on the undersides of leaves. Caterpillars may have up to five pairs of abdominal prolegs but never more. Sawfly larvae always have six or more pairs.

If there is still a question and a form of magnification is available, look for the presence of tiny hooks (called crochets) on the ends of their prolegs. Caterpillars have them—sawflies do not.

Knowing how to determine whether a specimen is a sawfly or a caterpillar may impress your friends but how important is it in real life?

Answer: It is of prime importance when it comes to controlling them. Some pesticides (such as Bt, (*Bacillus thuringiensis*) kill caterpillars easily but are ineffective against sawflies.

On the other hand, pesticides that traditionally are effective against bees and wasps are also effective on sawfly larvae.

The bottom line is that not all caterpillar-like insects are caterpillars. You should always be certain that it is a caterpillar before you apply caterpillar controls.

Chiggers are down right rude!

By Timothy J. Gibb, Entomology Department, Purdue

Americans should not have to tolerate rude behavior, especially from something as small as a chigger! And yet, that is just what we are exposed to every summer from May through September in Indiana. Chiggers are immature mites, so tiny that they are seldom seen. Several can actually fit on the period at the end of this sentence. Chiggers most often occur on the tips of tall grasses, shrubs and weeds where they wait to drop off onto any large animal that happens to brush by. Usually these animals are birds, amphibians or small mammals but the mites are just as happy with the odd human that passes by. Typically chigger mites fall onto shoes or pant legs where they begin climbing in search of some tender, moist, skin to bite. They seem to concentrate in areas where clothing fits tightly against the body, such as around the ankles, groin, waist or armpits. This is exactly the rude behavior that I am talking about. A simple bite on an arm or back of the neck may be acceptable, and can be itched in public. But public itching of the groin area, the armpits or under the bra strap is an entirely different matter. It is socially unacceptable, politically incorrect and may even be illegal in some countries.



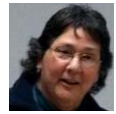
Line drawing of a chigger
(magnified many times)

And itch you must. Once chiggers bite, there is no alternative. Chiggers do not burrow into the skin but rather pierce skin cells with their mouthparts and inject their special chigger saliva. This saliva contains enzymes that breaks down cell walls and causes the skin cells to liquefy. Human immune systems react to this foreign enzyme, resulting in not only infuriatingly, and intense itching but also in the formation of a hard red wall at the spot of the bite. The chigger capitalizes on this body reaction—uses the round wall, called a stylostome as a straw to suck up its meal of dissolved body tissues, and then promptly drops off immediately after feeding. The itching intensifies, however, over the next 20 to 30 hours and may go on for days or weeks, depending on the person.

So, how does one stop chigger bites from itching? Well, aside from amputation, physicians can sometimes prescribe an antiseptic/ hydrocortisone ointment. This may help ease the itch and reduce chances of secondary infections caused by the itching and scratching (continued on page 10)

In the grow

By Rosie Lerner, Purdue Extension Consumer Horticulturist



Q. Could you tell me about the weed in the attached photo? I see them everywhere. Last year at the Celery Bog Park, I noticed big piles of them where someone had gone through and pulled them. Is it something new to our area in recent years? And is it considered invasive? PB, Lafayette, Ind.



Garlic mustard

Photo credit - PB/Lafayette, Ind.

A. This notorious pest is called garlic mustard; it's an invasive, biennial species that quickly colonizes where it lands. Biennials produce foliage the first growing season, flowers and seeds the second year, and then that plant dies. What makes this species so invasive is that its seedpods pop open to release hundreds of seeds, and, thus, a single plant can form a colony in just a couple of years.

The key to control is to prevent the plants from going to seed. The plant is easy to pull, especially following a rain. Repeated cutting back of the second-year flower stalks will also prevent seed formation.

More information on garlic mustard is available at <http://extension.entm.purdue.edu/CAPS/pestInfo/garlicMustard.htm>

Q. I read with great interest your article about winter burn on shrubs. I have a rhododendron that was my grandmother's, and she passed away many years ago. I would love to save it if at all possible, but I am not sure what to do. It has both green and brown leaves on it. Should I prune it back, or just leave it alone? Any advice you can give will be greatly appreciated. SK, Derby, Ind.

A. The toll on our landscape plants from this past winter is still revealing itself, and I suspect we will continue to see some plant damage as summer heat and dry spells come on. Injured plants will need all available green foliage for photosynthetic production of carbohydrate reserves to help with recovery. Dead stems can be removed any time, but conservative pruning of even partially green twigs and branches is advised. (continued on page 8)

In the grow (continued from page 7)

You can always prune more after the full extent of injury and potential for recovery is realized. Read on for a bit more on this topic.

Q. I read with interest your May column where you mentioned holly as being most susceptible to this past winter's extreme temperatures. My lovely holly, which has been around for at least 10 years, had at least three-fourths of it damaged. Leaves have turned brown and are dropping off. Will it grow back if I cut it off 18 inches or more, or should it be replaced? SH

A. I think it is a bit too soon to know whether the plant will fully recover, or if it would be best to replant anew. Dead stems can be removed any time, but if the plant is to recover, it will need as much carbohydrate reserves as it can muster. Drastic pruning back to 18 inches would likely deplete what few reserves it has.

A more conservative approach would be to remove any dead or badly damaged branches and retain as much of the green foliage as possible until it can recover a bit. If all goes well, next year you can do a more gentile, renewal pruning, consisting of removing about one-third of the oldest (largest) branches back to a few inches. Repeat this approach annually and by the end of the third year, the entire plant has been rejuvenated. Additional information on pruning ornamental trees and shrubs is available at

<http://www.hort.purdue.edu/ext/ho-4.pdf>.



Holly winter injury
*Photo credit - Rosie Lerner/
Purdue Extension*

2014 Perennial Plant of the Year™

***Panicum virgatum* 'Northwind'**

Panicum virgatum 'Northwind' is the Perennial Plant Association's 2014 Perennial Plant of the Year™. *Panicum virgatum*, pronounced PAN-ic-um ver-GATE-um, carries the common name of switch grass or switchgrass.

<http://www.perennialplant.org/index.php/education/plant-of-the-year>

Volunteer opportunities

compiled by Mary Cusack

Location	Time	Jobs	Contact
Hilltop Gardens	year around	various	Charlotte Griffin, 812-345-8128
MG Demonstration Garden	seasonal	various	Herman Young, 812-322-5700 Jeanie Cox, 812-360-3587
MCMGA Garden Walk Committee	year around	select gardens	Mary Jane Hall, 812-345-3985
Bloomington Community Orchard	seasonal	various	Stacey Decker, getinvolved@bloomingtoncommunityorchard.org
Cheryl's Garden at Karst Farm Park	summer	design and maintain	Linda Emerson, 812-345-2913 (cell)
T. C. Steele SHS	seasonal	various	Anthony Joslin, 812-988-2785
Flatwoods Park Butterfly Gardens	seasonal	various	Cathy Myer, 812-349-2805
MCMGA Horticulture Hotline	year around	inquiries & research	Amy Thompson, 812-349-2575
MCMGA Speakers Bureau	year around	various	Amy Thompson, 812-349-2575
MCMGA Newsletter	year around	write articles	Helen Hollingsworth, 812-332-7313
MCMGA Web Site	year around	various	Stephen Anderson, 812-360-1216
MG Program Committee Member	year around	plan MG programs	Sandy Belth, 812-825-8353 Susan Lovell, 812-339-5914
Middle Way House Roof Top Garden	seasonal	various	garden@middlewayhouse.org or call Toby Strout, director, 812-333-7404
Wylie House	year around	various	Sherry Wise, 812-855-6224
Mother Hubbard's Cupboard	year around	education, resource	Kendra Brewer, garden@mhcfoodpantry.org
WonderLab Garden	2 times monthly	various	Nancy White, 812-824-4426
Hoosier Hills Foodbank	year around	various	Nicole Richardson, 812-334-8374

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

Keep a copy of any volunteer records forms you submit to the extension office.

Japanese beetles are upon us

By Doug Richmond, Turf Entomologist, Purdue

The first Japanese beetles of the year were captured June 8 in West Lafayette. Emergence is now in full swing.

This imported pest is common east of the Mississippi river and in the Mississippi river valley. Adults feed on more than 400 plant species including many common ornamental plants. The soil-dwelling larvae (grubs) feed on or may otherwise damage a variety of plant roots including those of ornamental trees, shrubs, and turfgrasses.



For more information about the biology and management of this insect, visit the following Purdue Extension Entomology links.

Japanese Beetles in the Urban Landscape, <http://extension.entm.purdue.edu/publications/E-75.pdf>

Turfgrass Insect Management, <http://extension.entm.purdue.edu/publications/E-61.pdf>

Chiggers are down right rude! (continued from page 6)

—but it is never a perfect solution. The best solution is to avoid getting into chiggers in the first place. Stay away from tall grasses and shrubs if possible. Chiggers love to live in brambles, as most people who pick black raspberries know. They also inhabit grasses close to the ponds and streams where fishermen stand. If you must go in those areas, tuck your pant legs into your socks and apply insect repellent containing DEET to the shoe and ankle area. This will stop many of the mites from beginning their climb to areas where clothing fits tightly. (Theoretically, avoiding tight fitting clothes or going naked might help. If nothing else, it will certainly confuse the little biters—not to mention friends and neighbors).

One of the most effective methods of preventing chigger bites is to change clothes and take a hot soapy shower as soon as possible after being in chigger-infested areas. The mites are so small that it may take them several hours to crawl from shoes to where they want to bite. Often they require several hours to crawl from shoes to where they want to bite. Washing them away with a sudsy shower before they arrive is the most effective method.

Rose-of-Sharon

By Rosie Lerner, Extension Consumer Horticulturist, Purdue

If you live in the Midwest, you are likely familiar with the summer-blooming shrub commonly called Rose-of-Sharon, but you may not know it by its other common name—shrub althea. You may not be aware that it is a hibiscus, that its scientific name is *Hibiscus syriacus* or that it belongs to the Mallow family, Malvaceae.

Rose-of-Sharon is a large shrub, reaching up to 12 feet in height and nearly that in spread. The plant adapts well to most soil conditions, except extremely wet or dry, and is generally hardy throughout Indiana. It will perform best in moist but well-drained soil in full sun. The foliage is late to leaf out in spring, remains green through late autumn and has little, if any, display of fall color.

The primary attraction is its large flowers of white, red, purple or blue, beginning in late June to early July and often continuing through August and perhaps September. When all goes well, the plants are loaded with blooms, virtually covering the entire shrub.

However, failure to bloom and bud drop seem to be common problems with Rose-of-Sharon, and, yet, we don't know exactly why. It flowers on the new growth each year, so even if the plant experiences winter injury, it is still able to produce flower buds. But many are frustrated when the plant puts on lots of buds that fail to open. Sometimes the plant may start out blooming normally but, as summer wears on, the buds start to drop prematurely.

Individual flowers of this plant are not particularly long lasting, so it is difficult to say what is premature blossom drop. Hot temperatures, heavy rain, and wind will hasten drop of mature blooms. But, if buds and immature blossoms are falling, it may be caused by plant stress, such as too little or too much moisture and/or fertilizer. There is a fungal disease called *botrytis* that infects flower buds and causes them to turn brown and drop, often before or just after they open. Thrips are insect pests that feed on flower buds and can cause the buds to drop. It is possible that a combination of these factors is to blame.

But I do wonder whether some bud drop is just normal for this species. After all, the shrub does tend to produce huge numbers of flower buds, so maybe this is nature's way of thinning out the load so the plant's resources are not overwhelmed.

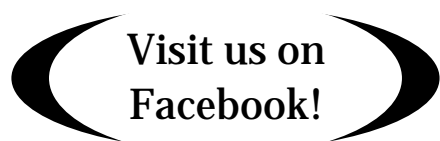
Since it flowers on new growth, you can prune Rose-of-Sharon in late winter or early spring. It can be pruned back hard to keep the plant more compact. If fewer, but larger, blooms are desired, you can trim back again in late spring to reduce the number of flower buds per stem. Some authors recommend pruning back to two or three flower buds per stem. I wonder if this would reduce the blossom drop as well?

**Monroe County
Master Gardeners
Association**

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Helping others grow!



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Master Gardener Calendar

Tuesday, July 22, 6:30 p.m., general meeting at the Demonstration Garden to prepare the garden for Monroe County Fair visitors; refreshments served

Saturday, July 26 through Saturday, August 2, daily, Monroe County Fair, 5700 W. Airport Road, Monroe County Fairgrounds

Friday, August 1 through Sunday, August 17, daily, Indiana State Fairgrounds, 1202 E. 38th Street, Indianapolis

Tuesday, September 23, 6:30 p.m., general meeting at the extension office meeting room, two speakers, two hours of education credit available