



Master Gardener

Vol. 10 No. 8, August, 2005
News for Delaware County Master Gardeners



Calendar

**NO AUGUST MG or MG BOARD MEETINGS—
STAY HOME and
WATCH YOUR FLOWERS GROW**

Second Saturday—August 13th

10 AM.. Planting bulbs in your garden.
11 AM....Pressed flowers given by Jesse Crews.
Because of the cancellation of the July "Second Saturday", Jesse will be presenting during August's second half .

Wednesday, August 17th—

Master Mentors meeting
7:00 pm—Smedley Park

Tuesday, August 23rd

Orientation for new MG Class.
2-5 pm—Smedley Park

Tuesday, September 6th,

MG Board Meeting
7:00 pm— Smedley Park

Saturday, September 10th,

*Delaware Valley College,
Doylestown, Bucks County*

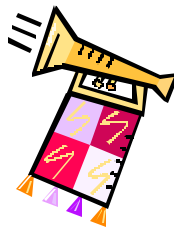
"Deer in Your Backyard: How to Deal With the Challenges of Overabundant Deer in Your community."

This seminar is presented through the Penn State Extension Forestry department.

For More information contact Michael T. Wolf, (814) 472-7986 or mtw107@psu.edu

Saturday, September 24th

Fall Fest at Smedley
9:00 am to 3:00 pm



THIS PUBLICATION IS AVAILABLE IN ALTERNATIVE MEDIA. The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admissions, and employment without regard to personal characteristics not related to ability, performance or qualifications as determined by University policy, or by state or federal authorities. The Pennsylvania State University does not discriminate against any person because of age, ancestry, color, disability or handicap, native origin, race, religious creed, sexual orientation or veteran status. Direct all inquiries regarding this non discrimination policy to the Affirmative Action Director, The Pennsylvania State University, 201 Willard Building, University Park, PA 16802-2891; tel (814) 865-4700/vm (814) 863-1550/TTY.



From the Coordinator: *Linda Barry*

The Fall Fest Committee has met every two weeks this summer, and has planned a great event. The brochure is included with your newsletter. We will need volunteers for the many activities. Please

contact Alyce Zellers if you would be available. Thanks to Barbara Meahl for writing and producing the brochure.

We were given a new upright freezer for the Cooperative Extension office by Marie Coyle. Thanks to Marie, the Nutrition, 4-H, and Master Gardeners will be able to safely store food items for our programs. We also thank Steve Kosiak, Stephen Hinds, and Gordon Jungbluth for picking up and delivering the freezer.

Master Mentors will be meeting on August 17th at the Environmental Center. Lisa Augustine is chairing this committee and will have specific information for the volunteers about the training schedule and mentor assignments. Please contact Lisa if you are interested in working with this committee.

We have a request for volunteers to work with the Holcomb Residential Unit, and group home for mentally challenged men. They have a great property in Aston, and would like to do some gardening. Chuck McLaughlin has already worked with them to construct raised beds and prepare them for vegetable gardening. They also would like to do containers for their new deck, and some foundation plantings. If you would like to work with this group or get more information, please contact me. The director is very enthused about the projects, and will provide supervision and materials.

We need volunteer hours recorded for many of our members for 2005. Please try to update your

hours and advanced training as soon as possible. The report is due at the end of September.

The Master Gardener desk has a new Dell PC. All of the Macs have been replaced in the office because PSU will not offer computer support for them after this fiscal year. Most of our volunteers are more comfortable with PCs, and will find this a welcome change. There is a password required for this new computer. It is taped to the front of the machine. Bonnie Reale, the Office Manager, also has a copy of the password. In addition to the new computer, we now have snacks for volunteers who find they are working on a project longer than they had anticipated. Thanks to Liana Bauerle, we have some healthy snack choices stored in a container near the research library. Please help yourself.

June Wojtowicz and the Garden Contest Committee have mailed flyers and applications for the 2005 Garden Contest. You will find this in your newsletter, also. Master Gardeners are welcome to participate in the contest. Judging will be August 25th and 26th. A great incentive to finish that last gardening project!

There are still a few openings for Hortline in August. Please contact Liana Bauerle if you would like to fill one of those slots.

MG OFFICERS & COMMITTEES

President:	Alyce Zellers
Vice President:	Kathy Hornberger
Treasurer:	Ken Paulsell
Secretary:	Tara Clarke
Hours Keeper:	Chantal Wildman
Coordinator:	Linda Barry—610-690-7669 lrb16@psu.edu

Committee Chairs:

Newsletter :	Barbara Smith
Mentoring :	Lisa Augustine
Field Trips:	Gerry Eunson
Social Events:	Jennifer Dean
Arbor Day :	Mary Sambor Elsie Mueller
Garden Select :	Robin Queenan Gail Brewer
Flower Show:	Gayla McCluskey
Hort Therapy:	Delilah Fordes
Hortline:	Liana Bauerle
Home Gardener's School:	Diana Breen Ken Paulsell
Speakers Bureau:	Joe Daniels
MG Recruitment:	Marty Roelandt

NEWSLETTER STAFF:

Editor: Barbara Smith
 Web Designer: Kathy Moyer
 Committee: Cynthia Sabatini, Linda Barry, Joe Daniels, Carolyn DiPaulo, Barbara Meahl, Carl Pfeiffer, Arlene Pugh, Tina Coleman, Jane Baserga, Christine Gradel, Kathy Hornberger & Marion Nelson
 Web site address: <http://delaware.extension.psu.edu/MG/>

Cooperative extension - Email: DelawareExt@psu.edu



FROM MG PRESIDENT . . . Alyce R. Zellers

Things for the Fall Fest have been buzzing along with the brochure being sent out this week. You have had to been hiding under a rock (boulder?) not to hear about this in some form. Like plants in our garden, we have planned it, discussed whether it will work with other components, considered price, and hopefully it will grow and expand next year!

Since we have such a great location, beautiful gardens, great MGs, and a purpose to educate the public, let's make the most of what we have.

The next meeting will be Tuesday August 9th at 6:30 at Smedley. Please try to attend if you can help with this event. It represents all Delaware County Master Gardeners, so let's demonstrate what we so strongly feel about: Gardening!!

We will have the "Great Deal Plant Sale", the "Frugal Gardener Table", vendors in-

cluding someone selling pumpkins and mums, a food vendor with excellent barbeque, 4-H representing several of their programs, Nutrition with information about what they are all about, an area for MGs to answer questions about plants/gardening and a chance to "show" off the beautiful gardens.

The only charge will be for attendees signed up for the several lectures that will be given throughout the day. Things needed for this to be successful:

Plant donations:
plants can be dropped off at Smedley the Thursday and Friday before the event or call me at 610-565-9906 and you can drop them off at my house for some plant sitting before the event. Plant tags indicating what it is would be great.... Don't worry about cultivars etc, just general names. Thank you

Maru and Geri for donating plants already.

Donations for the Frugal Gardener table such as garden items that you no longer use, don't like, got as a gift (what were they thinking?) or gently used items that still have some use to them.

Assistance would be lovely with logistics for the day, information, registration, answering questions, helping people to their cars with purchases, setting up and breaking down and of course, having a great time.

So, if you cannot make it to the meeting next Tuesday, contact Alyce or Linda for information regarding the day and how else you might be able to help.

One last thing, I want really want to give a big hug and a hearty thank you to everyone who has worked hard on this event in the past few months and those of you that will work on it in the future.

SECOND SATURDAYS FOR 2005. . .

August 13th—Planting & Care of Bulbs
& Pressed flowers given by Jesse Crews
September 10th—Garden Design
October 8th—Scarecrow Making,
Pumpkin Painting
November 12th—Holiday Ornaments
December 10th—Wreath Making

All programs are held at Smedley Park and run from 10AM to Noon. Cost is \$5 per person, except for the July, October, November and December workshops which are \$10 to cover materials for a take-home project.



Here's Joe Daniels, looking very tiny, in this marvelous hillside garden, judging a 2004 Garden Contestant.

Cool Mojitos



Lots of fresh mint is the secret to these refreshing drinks

The secret to a good Mojito is lots of fresh mint. Habana Restaurant in San Francisco goes through 100 pounds of mint a week to make 1,000 Mojitos. The finest leaves get muddled for the drink; imperfect leaves go into a simple syrup. Levende Lounge, also in San Francisco, crushes even more fresh mint leaves for each drink. Inspired by both recipes, we developed this simplified home-style Mojito that follows their minty lead.

Mojito

In an 8- to 10-ounce glass, combine 20 rinsed fresh mint leaves (each about 1½ in. long) and 2 teaspoons superfine sugar. With a wooden spoon, pound mint leaves with sugar to coarsely crush. Add 4 to 5 tablespoons light rum, 3 tablespoons fresh lime juice; mix well. Fill glass with ice cubes and 4 to 6 tablespoons chilled soda water. Garnish with a sprig of fresh mint. Makes 1 serving.

Bug Wars by Marie Hofer, Gardening Editor, HGTV.com

Thrips and aphids have made their annual pilgrimage to do battle with my yellow roses. So far, the roses are winning. Aphid damage seems relatively minor, and the



An insatiable pest, the cabbage looper feeds mostly on the undersides of leaves. Natural enemies usually can't help with most infestations, and chemical controls or the biological insecticide *Bacillus thuringiensis* have to be used.

telltale signs of thrips—buds that don't open, curled petals and occasional brown spots on an open flower—involve less than a fifth of the blooms.

So I'll let the plants handle things; they're pretty healthy and there's no excessive new growth that's so appealing to plant eaters. Besides, ladybugs and green lacewing larvae (nicknamed "aphid lions" because each larva eats up to 200 soft-bodied insects per week) are already working the bushes. Wherever good bugs are duking it out with the bad

guys, I make it my business not to interfere.

It's not that I'm a pacifist. My fingers know quite

well what it feels like to squash Mexican bean beetle eggs on the undersides of bean leaves. A few too many leaning towers of Japanese beetles on anything calls for a swift kick into a pail of soapy water; pyrethrin takes care of some too. My husband and I leave every wasp nest undisturbed and even escort the occasional wasp out of the house so that it can go back to work in the garden. And chemicals come out on occasion—when the problem is big, involves a dearly beloved tree or crop, and when mechanical or cultural means are of little use. But then I try to target the specific pest (or disease) and do as little harm to other critters as possible.



How do you decide when to take action against a garden pest? Here, the Colorado potato beetle, which does its greatest damage on potato crops if it feeds within two weeks of peak flowering. If, however, it attacks either very early in the life of the plant or in the last few weeks before harvest, it has little effect on yields



As an adult, the green lacewing feeds mostly on pollen and nectar, but in its larval stage, it's an aphid's worst enemy. Plus, lacewing larvae prey on other small, soft-bodied insects such as thrips, spider mites and mealybugs.

A lot of times, gardeners know, the best course is to not reach for the bug spray but to keep plants healthy. A plant that's well-sited and cared for—getting the type of climate, soil and light it craves, and receiving neither too much nor too little water or fertilizer—is more resistant to attack. Having lots of different species in your landscape, rather than just a few, helps reduce the likelihood that a massive infestation will occur. Not using broad-spectrum insecticides too soon and/or willy-nilly helps keep your allies—the good bugs—

healthy. And if you want to hedge your bets even further, avoid planting pest-prone species altogether.

Sometimes infestations are self-limiting. Left to her own devices, Mother Nature often finds a way to balance things out. The Eastern tent caterpillar tends to go on an eating binge for a couple of seasons, but its M.O. as a tree-defoliator comes to an end in an area when a particular virus moves in and wipes it out. As you well know, though, you can't always depend on

the rescue arriving in time. How does the gardener know when to intervene in the bug wars?

Calling in the Good Bugs

Do plant problems have you bugged? Field reporter Mike Brunswick heads to an entomology lab where Dr. John Luhman takes him into the microscopic world of plant pests. In the close-up world of bad bugs, learn how good bugs can be used to control them.



This ivy is dying--not from lack of water as it might appear--but by spider mites

As a biological control scientist for the Minnesota Department of Agriculture, Luhman closely examines the world of bugs--the good and the bad. There are far fewer harmful insects than helpful insects, but it's the bad bugs that get the most attention. Luhman describes some of the bad bugs and then shows us the good bugs he uses to control them.

Spider Mites



Spider mites usually appear as tiny dots on the undersides of leaves

Spider mites can quickly destroy a living plant, but they have a natural enemy. Predator mites have piercing, sucking mouth parts--they use these to capture and suck the juices out of spider mites--they also feed on spider

mite eggs. Predator mites can destroy spider mites in as little as two days. The once-infected ivy plant will begin to push out new, healthy growth almost immediately.



...or you might see the mites moving about on thin spider web-like strands.

Mealybugs



A very active colony of mealybugs has covered this plant. A type of ladybug found in Australia is a voracious pest of mealybugs

Luhman releases cryptolamus--sometimes called the Australian ladybug--on a potato plant infested by mealybugs. A cryptolamus hits the mealybug, pierces it, and sucks the juice out of it.

Scale

Scale looks more like a disease than an insect. Most people notice the shiny honeydew droppings on the leaves before they see scale clusters on the backs of leaves or on plant stems. The best weapons against scale are the Australian ladybug and a very effective parasitic wasp. The wasp stings an individual scale and lays her egg inside it--this will eventually kill the scale. Luhman displays a fern on which scale went uncontrolled and another plant on which he declared biological war by infesting it with good bugs--the uncontrolled scale killed the fern, but the other plant is full of healthy green growth.



Shiny areas on the leaves are the result of honeydew, the droppings of scale insects

Aphids

Aphids, frequently encountered plant pests, are natural enemies of the common ladybug. One thing ladybugs do when crawling around on a plant is evaluate host populations. They'll feed on an aphid here or there when they're hungry, but the real feeding will begin only if there are many aphids present--that's also when ladybugs lay their eggs. If there aren't enough aphids on a plant, ladybugs will leave and fly out the nearest window. Ladybug larvae are the most effective weapons against



One of the most common plant pests is the aphid

aphid infestation, sucking the honeydew out of the insects and discard the carcasses.

The world of bugs is quite an interesting world, and the war waged between good bugs and bad bugs is truly amazing. There are millions of insects yet to be studied and identified, and as the information base grows, so will the lists of beneficial and detrimental bugs.

John Luhman, Entomologist
Minnesota Department of Agriculture
Biological Control Lab
90 W. Plato Blvd.
St. Paul, MN 55107
Phone: 612-282-6809
Email: john.luhman@state.mn.us

FERNS: THE BEAUTIFUL, THE GOOD AND THE BAD

Ferns are common to Pennsylvania. On a summer day, driving through nearly any forested area in the Commonwealth ferns will be a visible and common component of the plant community. For some folks, a forest without ferns is incomplete.

We have come to expect to see ferns in our forests. Ferns are summer. They are the green on the forest floor. Walking through the forest, ferns trampled under foot impart a special “green” smell to the summer air.

Ferns, while delightful to see and smell, are not always a sign of forest health. In Pennsylvania, we have at least 60 species of ferns – some large – up to 6 foot tall – and some very small – only inches tall. Some ferns, such as ostrich, sword, Christmas, interrupted, cinnamon, and spinulose woodfern, occur in specific habitats and appear as “clumps” of fronds. The clump ferns spread principally by casting spores that move on the wind. Under the right conditions, the spores germinate and develop eventually into adults. Because of their specific site requirements and the chance mating of spores with soil and moisture conditions, the spread of these ferns is slow.

Some of these fern species provide food and shelter for some wildlife species. Woodfern, Christmas, and at least some of the other clump provide food for deer, turkey, and grouse. In fact, at some times of the year, the green foliage of these ferns is principal components of grouse diets.

The other type of fern, the individual frond ferns, has two mechanisms for spreading. Like other ferns, they produce spores and face the same trials as all ferns. These ferns also spread by sending out specialized root like structures called rhizomes. These rhizomes spread under the forest litter and periodically support a frond creating a spreading mat of foliage with fronds several inches apart. Under the right light conditions, the spread of hayscented, New York, and bracken ferns across a forest floor is rapid and a threat to forest development. These three fern species are rather common in the state, and these three species are a bane to forests. Seldom does any wildlife feed upon the single frond ferns, which helps explain their increasing occurrence in our state’s forests. There is ample evidence that deer, by selective feeding remove plants that would compete with problem ferns. The simple removal of other understory plants and the suppression of tree seedlings by deer foster the spread of single frond ferns.

Once the forest floor becomes a sea of green hayscented, bracken, or New York ferns our ability to manage forests changes. These ferns create low

shade. This shade is very dense, too dense for some tree and most other plants to receive enough light to germinate. If other plants do germinate, the quality of the light that filters through the fronds changes, the red and blue light critical to seedling growth and development is taken up by the fronds. Only the green light, reflected by the fronds reaches the soil surface. Finally, overtime the fern community, which dies back each fall, creates a thick mat of fronds and rhizomes, a litter layer that decays slowly. Other plant seedlings that germinate in this mat often die from a lack of moisture.

Forests with ferns are pretty to view. Unfortunately, the presence of ferns reduces the chances for other plants such as wildflowers, native shrubs, and forest trees to grow. Once established, the understory of ferns will persist and change the forest for years to come. Reducing or excluding deer will help slow the spread of ferns, but it will not necessarily permit other plants to compete successfully with the ferns. Research suggests that we will have to use herbicides to reduce fern competition for light if we are to reestablish some forest functions.

Before you harvest trees or when you plan management activities, contact your forester to get advice about ferns and forest renewal. If you are a hiker or casual forest observer, enjoy the ferns, but know that they are affecting important forest functions and do not indicate an ecologically healthy forest.

If you would like to know more about forests and ferns, call the Forest Resources Extension Office and request the Winter 2004 Forest Science Review, titled “The Forest Nobody Knows,” published by the USDA Forest Service, Northeastern Research Station (see contact information below).

The Pennsylvania Forest Stewardship Program provides publications on a variety of topics related to woodland management for private landowners. For a list of free publications, call 1-800-235-WISE (toll-free), send e-mail to RNNext@psu.edu, or write to: Forest Stewardship Program, Forest Resources Extension, The Pennsylvania State University, 7 Ferguson Building, University Park, PA 16802. The Pennsylvania Bureau of Forestry and USDA Forest Service, in partnership with the Penn State’s Forest Resources Extension, sponsor the Forest Stewardship Program in Pennsylvania.

Written by Jim Finley