



# Ottawa County Master Gardener Program

MSU Extension Ottawa County 616-846-8250

**september  
2003**

## Master Gardener Volunteer Area of Specialization Now Offered

Active Master Gardener Volunteers or Advanced Master Gardener Volunteers may now work toward an additional certification in an Area of Specialization. The first area of specialization to be offered is Gardening With Children. A minimum of 15 hours of education is required. The curriculum is being developed and sponsored by MSU/MSUE horticulturists or others designated by the State Master Gardener Advisory Committee. A minimum of 30 hours of volunteer service is required for each Specialization and volunteers will be awarded a unique pin for each area.

Volunteers must keep track of their training and volunteer hours and submit forms to their coordinator. To retain the Area of Specialization designation, the individual must remain an active Master Gardener Volunteer.

## Soy Fertilizers Will Benefit Homeowners, Local Governments and Producers



EAST LANSING, Mich. – A value-added venture initiated by a group of Washtenaw County soybean growers may help local governments comply with EPA regulatory requirements and boost Michigan's \$356 million soybean industry. Clean Green™, a fertilizer made from soybeans, is an effective, environmentally friendly alternative to traditional chemical fertilizers for home lawns and landscaping, golf courses and athletic fields.

Because soy-based products such as Clean Green™ contain no phosphorus, their use may help to reduce phosphorus content in surface and groundwater to more acceptable levels without reducing

landscape quality. Traditional chemical lawn fertilizers are major contributors to high phosphorus runoff levels in surface waters.

High phosphorus levels are not a concern just for regulatory agencies but for anyone interested in surface water use or recreation. Elevated phosphorus levels tie up oxygen supplies in water and create a desirable environment for algae and weeds. Algae-filled surface water is unpleasant to use and is eventually unsuitable to support desired plant life.

According to Mike Score, Michigan State University (MSU) Extension agent, soy fertilizer is well suited to urban and landscape areas facing local government regulatory restrictions.

"The EPA has already issued a mandate to several Michigan communities requiring reductions in phosphorus runoff to surface waters," he explains. "Expanded use of soy fertilizer will allow property owners and lawn care professionals to continue managing landscape areas for high quality without the threat of adding phosphorus to area surface waters, even with continued use."

Clean Green™ also provides nitrogen and trace amounts of potassium to plants without the negative environmental effects of excess phosphorus. The product's slow-release (nitrogen) activity and low salt content eliminate worry about turf burn, even when the product is accidentally spilled. Clean Green™ is also non-toxic to humans, pets and wildlife, so there is no need to post treated areas.

Clean Green™ has consistently performed as well as or better than traditional chemical lawn fertilizers in studies conducted by MSU researchers. Grass treated with soy fertilizer stayed green longer, and landscape and turf grass professionals have given the product high scores for promoting excellent turf color and quality.

Priced comparably with chemical fertilizers, Clean Green™ could be less expensive in the long term because of the

product's environmental benefits. It needs to be applied only two times per year because the application rate is higher for soy fertilizer than for more concentrated chemical products.

"When reduced applications per year and environmental benefits are accounted for, soy fertilizer is a very good value for communities and property owners," Score says.

Increased use of soy fertilizer will also benefit soybean producers.

"Increased demand for soybeans will result in higher prices for local producers," Score explains. "This may lead to greater opportunities for profitable farm operations and reduced pressure to sell off land for non-farm use."

Practical Soy L.L.C., the product's marketing group, sold more than 80 tons of Clean Green™ during 2002, its first year of operation. Since then, another competitor has emerged.

"Seeing competitors start up is a healthy sign that the product works well and that there is potential for expanded use by consumers and lawn care professionals," Score affirms.

Practical Soy L.L.C. recently developed a new bag design that provides spreader calibration information to help homeowners apply the appropriate amount of Clean Green™ to their lawns. A new package for use in gardens and landscape areas was also developed.

Clean Green™ is available through retail outlets in the Ann Arbor, Detroit and Traverse City areas. A list of stores carrying Clean Green™ can be found at the Practical Soy L.L.C. Web site, [www.cleangreenfert.com](http://www.cleangreenfert.com)

Project GREEN (Generating Research and Extension to meet Environmental and Economic Needs), the state's plant agriculture initiative at Michigan State University, provided the initial funding to evaluate the suitability of soybeans as a source of lawn and landscape fertilizer.

**Project GREEN** is a cooperative effort between plant-based commodities and businesses together with the Michigan Agricultural Experiment Station, Michigan State University Extension and the Michigan Department of Agriculture to advance Michigan's economy through its plant-based agriculture. Its mission is to develop research and educational programs in response to industry needs, ensure and improve food safety, and protect and preserve the quality of the environment.

To learn more about Michigan's plant agriculture initiative at Michigan State University, visit [www.green.msu.edu](http://www.green.msu.edu)

### More Than Just a Chair



According to the U.S. National Arboretum, Malus (family Rosaceae) 'Adirondack' is considered a near-perfect crabapple. An extremely attractive tree that is much more disease-resistant than other crabs, adaptable to most soils, does not need pruning to maintain shape, and is hardy in zones 4-8. 'Adirondack' sounds like a tree everyone would want, right? Question is, where to buy them! I've phoned a number of well-stocked nurseries but have yet to locate a retailer in the area that handles them. This spring I ventured out in search of 'Adirondack' and any other superior crabs and I have to say, I wasn't too impressed with what I found. In one nursery I counted appx. 20 varieties for sale. Of those, maybe only 2 or 3 are worth planting (based on their overall disease resistance and my woodies bible, *Manual of Woody Landscape Plants* by Michael Dirr) the rest are all notoriously susceptible to every crummy apple disease known.

Have you ever had an encounter with 'Adirondack'? Do you have one in your landscape? Have you ever seen one for sale locally? If so, please drop me a line, won't you?

### EAB = Extremely Aggressive Bug

Well, folks, by now you've heard the horrible truth: the Emerald Ash Borer has left its fateful death signature on ash

(*Fraxinus*) trees in West Michigan. In late July, the tell-tale d-shaped exit holes along with galleries under the bark were positively ID'd on ash trees by MSU entomologists in Kent County. So now what? First, as Master Gardeners you should all be well-informed. This is a major ecological situation that is almost certainly going to reshape the landscape in the same way Dutch Elm disease did 30 years ago. Master Gardeners need to know how to properly ID ash trees (Mountain Ash, *Sorbus*, is not a true ash and is therefore not effected by EAB) and then how to determine the presence of the EAB from the clues they leave behind. Already the local news media has done a good job of confusing people. For starters, one major newspaper ran a pic of the EAB and used an image of the Japanese beetle.

Also, Beware of scams! At a conference last summer I was amazed to learn how many homeowners are ripped off by companies who charge outrageous fees on bogus "cures" for EAB, gypsy moth, and many other tree pests and diseases. Already the local Big Boxes are running advertisements on products to "control" EAB that yet have no know efficacy.

The extension office now has an EAB information packet put together by MSU entomologist [Dave Smitley](#). On August 11, Kent MSUE and Ottawa MSUE met for a special training session, led by Smitley. Six Ottawa County Master Gardner trainees attended and will be called upon for future EAB assistance.

If you would like our informational packet on the EAB please call or stop by. I also have a list of alternative tree species selections to replace dead and dying ash trees. Sales of ash trees are now banned in Michigan.

If you find definite signs of EAB, contact the MDA Emerald Ash Borer hotline at 866-325-0023. Please do not call the EAB hotline for what is generally known as "ash decline" problems as a result of drought, etc.



### Heroic Fungus Hunters Save the Day by Sue Nichols

July 25, 2003 - A team of scientists – including one from Michigan State University – has announced a genomic sequence for the rest of us: mapping the DNA of a grain fungus that wreaks havoc with beer brewing.

The genomic sequence of the fungal plant pathogen, *Fusarium graminearum*, has been completed, providing scientists a roadmap to combating a fungus that infects wheat and barley crops, rendering them unusable.

"We have enough to do a tremendous amount of good work," said Frances Trail, MSU associate professor of plant biology. "Now we can begin to unravel mechanisms to combat this fungus which is a devastating problem in Michigan, the Midwest and all over the world."

This fungus is a serious pathogen of wheat and barley in Michigan and throughout the Midwest. It causes *Fusarium* head blight, which reduces grain yields, and taints grain with mycotoxins that have been found to be detrimental to human and animal health.

*F. graminearum* also is a pox to beer producers. Malting creates a fungus friendly environment, and barley infected with the fungus produces beer with a vast excess of foam. As a result, the malting barley industry has a zero tolerance for this fungus.

The fungus comes with a steep price tag – rendering crops worthless. For example, head blight outbreaks in the 1990s cost U.S. agriculture \$3 billion. *F. graminearum* begins its blighting ways as pinprick-sized pods that spit spores into the air. The spores float over grain fields, landing on flowering wheat and barley. The spores grow into the wheat flowers. The often cool, wet weather of the U.S. Midwest provides an ideal environment for the fungus to take hold.

The result: fields of blight, identified by withered, bleached heads of grain. At harvest, many of the grains are shrunken and white, and harbor the mycotoxins. "Classical control methods for blight just aren't working," Trail said. "Sequencing this fungus can be the beginning of designing new methods of control."

The *F. graminearum* sequencing project represents a partnership between MSU and the Whitehead Institute Center for Genome Research at the

Massachusetts Institute of Technology, H. Corby Kistler at the U.S. Department of Agriculture, ARS Cereal Disease Lab of University of Minnesota and Jin-Rong Xu at Purdue University.

Researchers now will work to understand and annotate specific gene function within the sequence. In Trail's lab, work already has begun on specific genes that appear to control the firing mechanisms of the spore pods.

The project was funded by the National Research Initiative in the USDA's Cooperative State Research Education and Extension Service, and reviewed through the USDA/National Science Foundation Microbial Genome Sequencing Project.

The results of the project can be viewed at [www.genome.wi.mit.edu/annotation/fungi/fusarium/index.html](http://www.genome.wi.mit.edu/annotation/fungi/fusarium/index.html)

### New Books in The MG Library

Beetles: A Field Guide to the Beetles of North America by Richard E. White;

Peterson First Guide to Caterpillars of North America by Amy Bartlett Wright;

Michigan Trees: A Guide to the Trees of Michigan and the Great Lakes Region by Burton Verne Barnes;

Ivies (Little Plant Library) by Hazel Key;

Michigan Gardener's Guide, 2nd Edition by Timothy Boland, et al.

### Master Gardener Trip to Chicago



I've scheduled a bus trip to the **Chicago Botanic Garden on Saturday, October 11, 2003.** The cost is \$50.00. We depart from the Grand Haven MSUE parking lot via Cardinal Buses, Inc., at 8:30 a.m. and will be dropped back in GH around 12:00 p.m.

"The Chicago Botanic Garden is home to 385 acres of vibrant specialty gardens, tranquil lakes, native woodlands and prairies. The Garden is considered to have the best collection of display gardens in the Upper Midwest and features glorious color and displays for everyone's enjoyment." -website.

Other current highlights at the Garden include:

- Great Chef Series - through October 12
- Chapungu: Custom and Legend, A Culture in Stone - through October 31
- JR. Railroad - through October 26
- Garden Plant Sales will be featuring their Bulb Bazaar from October 10 - 13

This trip is open to anyone who is interested and we must fill the bus, so bring your friends! **Make your check out to MSUE Ottawa County and mail it in now to reserve your seat. The deadline for reservations is Monday, October 1, 2003.**

### Growing Kids

There is something special going on at the Herrick Northside Branch Library on the North side of Holland. Nestled next to the building is a garden full of items that tap into any child's sense of curiosity. A place that teaches them about nature and gardening and provides additional space for programming library activities (the indoor space is rather limited). Many families have shown great interest in the gardens and even participate in the planting and care of the garden. If you visit the Children's Garden you will find five sections: the ABC Garden; the Senses Garden; the Big Garden; the Butterfly Garden, and the Wizard of Oz Garden. The garden has been utilized as part of various library programs for children including "Story Time", "Mad Scientist Mondays" and the "Children's Garden Club". Recently, children learned about vermicomposting and recycling with financial help from the Holland Garden Club. A new addition to the garden is the new 3-bin compost bin for the library's garden waste. The project was constructed by Dale Drier (way to go Dale!).

The Children's Garden is coordinated by our own Eileen Jenkins (Class of 2003). This garden has provided many learning opportunities for the next generation of gardeners. A big thanks to all who have helped with this project. Future opportunities to assist in this great project are as follows:

**Monday, September 22** – Kids will be harvesting seeds and taking cuttings for

next year's garden. Help is needed from 5:00pm to 7:00pm .

**Monday, October 20** – Kids will be planting spring flowering bulbs and will close with a snack as this is the last meeting of the year. Help is needed from 5:00pm to 7:00pm

**Volunteers may contact Eileen at 616-738-4360 or by e-mail [hnbej@llcoop.org](mailto:hnbej@llcoop.org).**

### Gardening for Jill

As some of you already know Jill Scheerhorn was injured in an auto accident two months ago and is still unable to walk. On August 5th, Fellow master gardeners Sue Barrett, Sharon McLaughlin and Judy Jackson went to work on Jill's garden. Jill was very appreciative of such a gesture of kindness from her fellow gardeners. Kudos to those who helped .

### Busy at the Market

The Master Gardener Table at the Holland Farmer's Market has been very busy. Averaging over sixty questions a week and handing out hundreds of information sheets since mid May, this has been the busiest year since 1996. More than 27 volunteers put in over 400 volunteer hours this summer. Many thanks to all who have helped make this the best year yet!

Michigan Master Gardener Association

### Shoreline Chapter President's corner



**Congratulations on a successful summer!**

WOW! I look at where the Master Gardener Program was seven years ago and I am amazed at where we are today. When I look at quality of the projects and the energy of the volunteers here in Ottawa County I am awed. It is my hope that we don't grow complacent. There are trainees who still need hours and Master Gardeners who need educational recertification credits, and a public that needs to be educated. There is always so much to do...

–Barry Andersen

**MSU Garden Day 2004**

Despite suffering two (yes, in one day) migraine headaches on August 8, I had a good time at MSU's annual Garden Day. I attended a morning workshop on how to build a greenhouse and decided I'm going back to my Smith and Hawken fantasy. Even though our workshop leader simplified it for us, I know for certain that I don't need to add yet another big project to my gardening universe. Next spring I'm going to cover four posts with some polyester shade cloth and call it a cold frame. Good enough.

The afternoon workshop on invasives/pesky plants was taught by Frank Telewski, Associate Professor and Curator of the W.J. Beal Botanical Garden at MSU. Frank is a great speaker and ended the hour with a pearl of wisdom that says it all: the most invasive species on earth? Homo sapiens.

Tracy Di Sabato-Aust was the morning's keynote speaker and, as always, a delight to listen to. I love Tracy for her hair and her nails and her cute shoes but mostly for her captivating speaking abilities. Tracy brings the magic and the excitement of gardening to life through dynamic presentations and engaging style.

**In Memoriam**

Long-time Master Gardener Sylvia Birkhead passed away in August. Sylvia went through the Kent Master Gardener Program in 1991, before classes were offered in Ottawa. She remained an active Master Gardener through 2002. I only knew Sylvia briefly - she came and interviewed me for an article for the Grand Haven Tribune, and then we had a number of pleasant email exchanges. I was appreciative of her welcoming me in as a stranger to this place.

This is an excerpt from one of Sylvia's volunteer forms from May 21, 1991: "[They] wanted some ideas for landscaping and growing perennials in the shade. I dug and took them some of my shade growers. We planted them. They've amended their soil with everything from foundry sand to 9-9-9 plus lawn fertilizer. I'm sending info on composting as they haul 1/2 pickup truck of lawn clippings to dump each week!

Thank you, Sylvia, for your dedication to sharing your gardening knowledge with others.

**EAB Scout Training Field Day on October 2**

**Interested in becoming an EAB Scout?** MSU agent Dave Smitley has coordinated a bus trip to Novi. Master Gardeners will receive full training. This trip is fully sponsored by MSU with an EAB Extension GREEN grant. There is no cost to you.

The trip includes:

1. Box lunches at Kensington Metropark
2. Bus and van transportation
3. Training materials (Terry Davis is ordering a chisel in a protective case for each person, and is obtaining a vial of KAA, and alcohol, for each person to put larvae in).
4. Public relations (to work with Robin Millsap).

The schedule is as follows:

- 10:00 AM Meet at Tollgate Conference Center, Novi, for coffee, donuts, introductions, tools and handouts, and presentation on detection and scouting.
- 11:00 AM Bus tour to see extensive range of extensive damage to mild to none. Stop at urban site to see damage to street trees or parking lot trees. Demonstration of looking for signs of damage and larvae.
- 1:00 PM Box lunches at picnic area at Kensington Metropark
- 2:00 PM Shade tree and woodlot infestations of EAB at Kensington.
- Opportunity to collect larvae in KAA.
- More instruction on detection of EAB.
- 3:00-3:30 Buses leave Kensington to return to home destination.

Just let Shane or Judy know if you would like to come. **The deadline for sign-up is September 23.**

**Master Gardener Volunteer Forms - Out With the Old, In With the New**

Very soon, Master Gardener Volunteers are going to be able to enter their hours into the new online state database right from their home computers. The old way of tracking volunteer's hours - done by the coordinator and then emailed to the Oakland County MSU Extension Office, is now obsolete.

The first phase of the new online database was recently completed and every coordinator will receive a password

to the online database on MSU's Master Gardener web site. Shortly thereafter, all volunteers will then be able to log on to the site individually and enter their volunteer hours into their personal files.

I think this will be a huge time saver for the coordinator's (it's an incredibly tedious job entering all that info) and will also enable volunteers to make changes and corrections at any time.

I am very thankful for this change. I will be sending out an instructional email when the online database is set up for volunteers to begin logging on. You will be given password info and instructions on how to access the database and enter your hours. If you don't have access to a computer, you will still be able to send your forms to the extension office to be entered from here.

Don't worry...I'll be here to help and answer questions.

**Continuing Thanks from the Coordinator**

I'd like to say thank you, again, to each and every one of you for your volunteer efforts. The first forty hours is a big commitment and I hear from many of you how much you juggle your schedules to fit in those hours. Believe me, I am always impressed with and thankful for all that you do. Being involved in this program takes a lot of initiative and self-motivation. Quite simply, this program could not run without the volunteers, as you are the most important resource that the Master Gardener Program has. The way I see it, all of you are the foundation that keeps this thing going.



The world **IS** a better place because of **Master Gardeners!**

**"Bringing Knowledge to Life"**

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