



# Imagine

Illinois Master Gardeners' Information,  
News and Education

Vol. 8 No. 3  
May-June 2007

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## Coordinators' Comments

By the time you receive this newsletter, National Volunteer week will already be over (April 15-21). Congratulations to all the volunteers, coordinators, staff and educators who make this program successful. Because of this outstanding commitment, 140,252 volunteer hours of service were given by Illinois Master Gardeners in 2006. Using the value of a volunteer hour (\$18.04) provided by the Independent Sector and the Points of Light Foundation this amounts to \$2.53 million dollars of service to Illinois communities. Master Gardeners also logged an impressive 54,144 educational hours in 2006.

It is never too late to thank your co-volunteers and coordinators... so if you haven't said thanks and congratulations— now is the time to do so!

 Monica David, State Coordinator

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## Home, Yard & Garden Pest Newsletter

Many of you are familiar with the *Home, Yard & Garden Pest Newsletter*, published during the growing season by University of Illinois Extension. The primary audience for the newsletter is green-industry professionals, but we know that many Master Gardeners also find the timely, Illinois-specific reports invaluable as the year unfolds, both for your own gardening endeavors and for advising others.

To aid you in your work, we're offering a special opportunity for Illinois Master Gardeners to subscribe to the electronic version of the *Home, Yard & Garden Pest Newsletter* for the low cost of \$5 for the season--a discount of 75%! By subscribing, you receive an e-mail notification each time a new issue is published, and your subscription gives you access to past issues of the newsletter as well.

Issues 1 & 2 were published in April, & 18 issues remain in 2007. Subscribe today so you can stay on top of the year's developments. To subscribe, visit this web site set up for Illinois Master Gardeners: [web.aces.uiuc.edu/hyg/mg.html](http://web.aces.uiuc.edu/hyg/mg.html)

## Important Dates

**May 27 & 28:** Garden Ramble, Wesley Whiteside's Five Acre Garden, Noon to 5 pm. Rare species as well as familiar ones are found in this unique garden. Plant Guides on site as well as vendors and speakers on plants and garden-related topics. The garden is located on the south side of Route 16, two miles east of Charleston. Donation \$6. Sponsored by the Coles County Historical Society.

**July 14:** Annual 'Summer Blooms' Garden Walk, sponsored by the McHenry County Master Gardeners in conjunction with McHenry County College, will showcase six private gardens in the Marengo area as well as the ever-evolving Master Gardeners' Demonstration Garden at McHenry County College. The gardens will feature fruits, vegetables, orchards, ornamental ponds, new varieties of perennials, annuals, a Victorian styled garden and an Asian-modern fusion garden. Tickets may be purchased in advance by calling 815-455-8697 or at Hubbs Greenhouse in Marengo, 947 East Grant Highway, Marengo (815-568-7312). Tickets may also be purchased on the day of the event at the Demonstration Garden at the college or each participating garden. Ticket price is \$10 through July 2<sup>nd</sup> and \$15 thereafter. Children under 2 are free – please no pets. The gardens will be open for viewing from 9 a.m. to 4 p.m. This is a self-guided tour.

**Deadline for submission of articles for the next issue is  
June 15, 2007.**

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## Garden Crusader Awards

This year Gardeners Supply will award more than \$15,000 in cash and products to individuals across the country who are using gardening to make a difference in their communities. The award categories are: education, urban renewal, restoration and feeding the hungry. To learn more about the awards, and how to nominate a gardener, visit [www.gardeners.com](http://www.gardeners.com) and click on the community tab for an online application. You may also call 1-888-239-1553 or email [crusader@gardeners.com](mailto:crusader@gardeners.com). Application deadline is June 1, 2007.

## Spotlight on Ford-Iroquois Master Gardeners

Ford-Iroquois Extension Master Gardeners are an active group of eight dedicated volunteers who remain focused on their mission of *“helping others learn to grow”*. We welcomed two new interns last year and look forward to the addition of two additional individuals this spring following completion of their on-line training. Several of our Master Gardeners have participated in advanced Master Gardener trainings and horticulture coursework at the community college. The Four-Seasons telenet series encourages area residents to explore new insights into horticulture topics as well.

The local library is the site for the group’s Idea Garden in Onarga. Since its beginning in 2004, this plot has literally “grown” in size and features five separate sections featuring herbs, prairie plants, a cottage garden, a children’s garden, a Japanese garden, along with a composting portion. Hopefully, this can be one of the gardens included in the 2007 Iroquois County Garden Walk later this summer.

Several of our members are retired elementary school teachers. They enjoy working with youth at area schools on a variety of projects including the creation of a butterfly garden at Crescent City Grade School. Students and their parents took an active role in the planning and planting process. It was located



just outside their classroom so students would have a chance to view their garden everyday. Parents and students commented on the fun they had as they worked together to spruce up their school. Everyone talked about what they were learning and many said they had never tried gardening before. The students also participated in watering the plants on a regular basis. A grant has been written to assure the sustainability of the project for the coming year. Another of our

Master Gardeners recently participated in a Career Day at a local high school, sharing information with students on horticulture related career opportunities.

Master Gardeners from our Unit visited Hornbaker’s Garden in Princeton for their annual field trip. They enjoyed viewing the hundreds of varieties of hostas, day lilies, and iris along with unusual tree varieties. All of these educational opportunities and volunteer service projects help us *bloom where we grow* in the Ford-Iroquois Extension Unit.

Karen Moore

County Extension Director / Master Gardener Coordinator  
Ford-Iroquois Unit

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## Weather Watchers Needed

Many Illinois residents are familiar with the hit and miss nature of showers and thunderstorms during the spring and summer. A new volunteer program designed to increase the density of rainfall observation locations is being coordinated by the Illinois State Water Survey, the national Weather Service, and the University of Illinois Extension Natural Resources Management Team. The “Community Collaborative Rain, Hail and Snow” (CoCoRaHS) network is a grassroots volunteer system of backyard weather observers of all ages working together to measure and map precipitation—rain, hail and snow—in their local communities. Volunteers are needed throughout Illinois.



CoCoRaHS is a non-profit community-based organization, supported by a grant from the National Science Foundation and other contributors. By using low-cost measurement tools, stressing training and education and utilizing an interactive web site, the aim is to provide the highest quality data for natural resource, education and research applications. The project began in Colorado in 1998, and currently has over 2500 observers in 13 states. Data collected by the observers are used by climatologists, hydrologists, water managers and the National Weather Service to monitor drought, heavy rainfall and precipitation patterns.

Training is required to become a volunteer in this network. Training session schedules are on the website. The training provides a great opportunity to learn from experts and to meet fellow CoCoRaHS observers. For more information visit <http://www.cocorahs.org> or email Steve Hilberg at [hberg@uiuc.edu](mailto:hberg@uiuc.edu)

## Chairperson's Chat

### Monkey See, Monkey Do

When I recruit Master Gardener trainees, one of the things I tell them is that being a Master Gardener is not about having the best garden or landscape in the neighborhood. Instead, it is really about helping your neighbors have the best garden or landscape. I make sure they hear this message before they ever get an application so they know what this program is all about. And I repeatedly remind them that being a U of I Extension Master Gardener is not about being a great gardener, it is about being an accomplished educator. One of the best ways to educate is by demonstration. Last summer I experienced an unintended example of that right in my own neighborhood.

It started when I decided to make a living grass sculpture. This meant allowing an artfully shaped section in my mostly bluegrass lawn take its natural course and grow to its mature height. I envisioned tawny grasses gracefully swaying in the breeze with the late afternoon rays creating a warm glow of enhancing backlighting. I would save time and fossil fuels by not mowing as much. I would create increased habitat for wildlife making everyone's life better. So, early in May, I stopped mowing three quarters of my south lawn.

As the days passed the grass grew and the neighbors began to notice. The first questions were ones of concern. "Barb, is your mower down? Do you want to borrow mine?" "No" I replied, "My mower is fine. I'm making a grass sculpture." "A what?" they wondered. Hence the educational process begins.

I imagine that your neighbors, just like my neighbors, have noticed that you are continually out putzing around in the yard. And that you, like me, have a collection of plants, edible produce and related projects that they both admire and ponder. They have most likely observed that your yard represents success more often than failure. This being the case, your methods warrant imitation. And sure enough, the next week my neighbor across the street stopped mowing a big swath in front of his house. When I asked him if he was making a grass sculpture too he replied, "No, but I thought if you did it, it must be right. I thought you were letting it go to seed to fill in a thin spot."

Quite frankly that thought never occurred to me. I was fixated on a soft evening glow highlighting dancing seed-heads – a vision I did realize. I learned from the variety of seed heads that appeared that I had several species of grasses. I observed that the tall grass added a new dimension to playing ball with my canine companion which she found to be delightful.

As June turned into July, and temperatures and rainfall exhibited an inverse relationship, I began to think that a wide expanse of knee-high, dry grass was not a prudent landscape amenity in a semi-suburban area. Especially when I recalled that it was just last summer when a close friend's mower went up in flames ignited from a leaky gas line. So I mowed and raked. And mowed and raked again. That was the end of my grass sculpture.

But this experiment, born of curiosity and laziness, was the beginning of the realization that I have the power to inadvertently influence the behavior of people by simply putzing around the yard. People are watching and they may imitate what I do. So don't let those unintended 'teachable moments' pass casually by. It's your commitment as a Master Gardener to embrace those moments and set a proper example. People look up to you for who you are and what you do. Use that position to 'Help others learn to Grow'.

Happy mowing,

Barb Bates, State Advisory Chairperson

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### Seed Collecting Opportunities

The Millennium Seed Bank Project is an international conservation project headed by the Royal Botanic Gardens, Kew, that aims to collect seeds from 10% of the world's flora by 2010. The project goal is to store seeds for long-term conservation, mostly for "what-if scenarios" such as global climate change or habitat destruction, but a portion can be requested by qualified groups for restoration or research. The Chicago Botanic Garden is undertaking the task of collecting 1,500 native species from the Midwest and Great Plains for this project.

The general collecting protocol is to collect 3,000 to 20,000 seeds from a single population for each species, never taking more than 20% of the available seed at the time of collection. The group collects from at least 50 individuals to maximize genetic diversity and does not collect from endangered or locally rare species.

The Millennium Seed Bank Project and CBG are looking for your help and would like to collect from 300 species this year. Master Gardeners and amateur botanists would be compensated \$50/collection plus mileage. Training would be provided for these individuals. For more information about this project visit the website at <http://cbgseedbank.org/> Questions may be directed to Betsy Allen or Emily Yates at [msb@chicagobotanic.org](mailto:msb@chicagobotanic.org)



# 2007 Master Gardener Conference

The Crowne Plaza

Springfield, IL.

September 6,7,8

The Master Gardeners of the West Central region invite you to share Illinois historic sites and museums as well as the aesthetically pleasing gardens of Springfield area. The conference offers enjoyable tours, entertaining and nationally recognized speakers and the opportunity to share ideas with fellow Master Gardeners from around the state.

## What's new for 2007?

### Master Gardener Digital Image Contest

Have you always enjoyed taking photographs of your garden creations? Do you like to take pictures of your prized flowers, fruits or vegetables? If so, here is your chance to showcase your gardening talents through photography. Get your cameras clicking and enter the "Master Gardener Digital Image Contest" for the Illinois State Master Gardener Conference for 2007.

There are Four Categories of entries in the contest: Plants: Images should include plants. People: Images should include human subjects in a garden or natural setting. If the individuals are close enough to recognize, then a photo release form must be submitted with the entry and include the signature from the subject. Wildlife: Images should include wildlife such as insects, mammals, reptiles, etc. Before & After: Images should display a before shot and after shot of any garden or natural area.

Master Gardeners can submit one image per category and only one image per entrant will be selected to win. All entries must be submitted electronically via e-mail to [kbassett@uiuc.edu](mailto:kbassett@uiuc.edu) between May 23, 2007 and August 23, 2007. Only one image per e-mail and the subject line must state "Master Gardener Digital Image Contest." Images must be submitted in jpeg format and should be 1200 x 800 pixels. No panoramic images. They should be in natural color. Each image should be named as the Entrant's Name, Master Gardener County, and the Category of Entry. Example: "John C. Photographer, Smith County, Plants."

Entries will be judged prior to the Illinois State Master Gardener Convention by a panel of three judges. The top entry in each category will receive \$25. All entries will be displayed in a slide show at the Master Gardener Convention. The top 12 entries will also be developed into a calendar. Complete details will follow in the Illinois State Master Gardener Conference registration information.

And, would your county like to brag about what project/s you have been doing in 2006-07?

Compile a 1 page display in Word Publisher, using digital photos and brief text. Details will be included with the State Master Gardener conference information. Think big! You can use this flier for your local PR, as well.

## Historic Garden Tours a Highlight of Conference 2007

### *All Day Tours:*

**Lincoln Home, Executive Mansion & Gardens, Dana Thomas House-** This tour will visit the Lincoln home and the Governors mansion and impressive gardens. Lunch will be served at the mansion. The tour concludes at the Dana Thomas House- an impressive example of the Prairie School of Architecture designed by Frank Lloyd Wright.

**Starhill Forest Arboretum, Hill Prairie Winery and New Salem-** The second all-day tour begins at the private arboretum owned by Guy Sternberg and then moves on to Prairie Hill Vineyard (lunch will be served in the renovated barn at the winery). The tour concludes with a stop at New Salem Village and a historical garden walk.

### *Half Day Tours:*

**Abraham Lincoln Presidential Museum-** This morning tour will feature the world renowned museum full of Lincoln memorabilia, along with still and animated displays of Lincoln's life and career.

**Richardson's Garden and the Lincoln Memorial Garden-** The second morning tour features the private gardens of Coyn and Susan Richardson, which include a rose garden, many shrubs, trees and perennials plus seven acres of prairie plantings. Next stop is a guided tour of the Lincoln Memorial Garden designed by Jens Jensen.

**Lincoln Home and Tour-** No visit to Springfield is complete without this afternoon tour to Lincoln's home and the tomb where he, his wife Mary and three sons are buried.

**Executive Mansion & Gardens and Washington Park-** After a visit to the Governor's Mansion and adjoining gardens, this afternoon tour moves on to Washington Park to tour the Botanical Gardens, Rose Garden and the Rees Memorial Carillon.

## A Wide Variety of Classes and Workshops will be Featured

Workshops and demos to be offered include leaf casting, orchids, plant propagation, flower arranging and Creating a PowerPoint show. A sampling of class topics include: hydrangeas, unpleasant plants, emerging diseases, weeds, children's gardening, the executive gardens, nature photography, big trees, landscaping and design, hot picks for perennials, shrub roses and much more.

## We Need Your Help for our Silent Auction!

We need your help to make the 4th annual Silent auction a success. We are looking for donations of art-work, sculpture, paintings, book, garden tools, garden gifts etc. The profits from the auction benefit the State Master Gardener office for expenses such as the Imagine newsletter. You may send your donation or bring it to the conference but please contact the Mason County office (309-543-3308) BEFORE THE CONFERENCE to let them know what you will be donating.

### Plan to Join us in Springfield, IL.

Join us in Springfield on September 6, 7, and 8th. A block of rooms has been reserved at the Crowne Plaza Hotel at a conference rate of \$70/night for a single room and \$85/night for a double. 217-529-7777 or 1-800-589-2769. Please mention the "University of Illinois Extension Master Gardener Conference" - to receive the discounted rate. Please remember that total conference costs are based on filling our reserved sleeping room block. Rates at nearby hotels are similar or higher than our conference rate at the Crowne. Please help us keep costs at a minimum by staying at the conference hotel!

**The conference registration materials will be posted on the website & online registration will open in mid-June. More details in the July-Aug Imagine.**

# TREES IN THE CONCRETE JUNGLE!

(Trees in Urban Landscapes; Problems and Opportunities)

This is a condensed version for publication at the *Imagine* newsletter. The full article (including diagrams and schematics) appears at <http://www.extension.uiuc.edu/mg/>

## The Situation (Needs)

Urban and suburban environments desperately need the presence of trees. In addition to the welcome shade they provide along streets, trees also act as oxygen generators, noise reducers and—in general—they add beauty to the jungle of concrete and asphalt. Trees that are planted in these environments, however, are faced with a multitude of problems: extreme heat in the summers (amplified and reflected from the surrounding asphalt, sidewalks and buildings), extreme cold and de-icing salts in the winter, the impact from utility lines, pollution from cars and many other adverse elements. This is NOT all of the problems, however.

## The Problem (Challenges)

In addition to the adverse issues above, and assuming the selection of the proper tree / cultivar was done right, there is still one major challenge to be faced: **THE SPACE AVAILABLE FOR THE TREE ROOTS TO GROW!**

Soils under paved areas are always heavily compacted and they have to be so, in order to sustain heavy traffic loads. The compaction of these soils, however, creates the undesirable effect of soil macropores getting crushed and drastically reduced in size. Normal “macropores” are fairly large spaces between soil particles that allow for the diffusion of air and the drainage of water through soil. In addition to that, the compaction in itself creates a soil density that would be difficult for the roots to penetrate! And if all that was not enough, the actual space and volume allocated for trees alongside a paved area is invariably very limited!

The restriction of available space for the roots to grow creates a number of inevitable negative results. Roots stop growing, or they start girdling around, or adapt and remain very close to the surface! The latter creates a multitude of new problems: pavement heaving and cracking (pedestrian accidents, lawsuits against municipalities, expensive repairs, etc.), instability to the tree’s “anchoring” system and vulnerability to drought conditions!

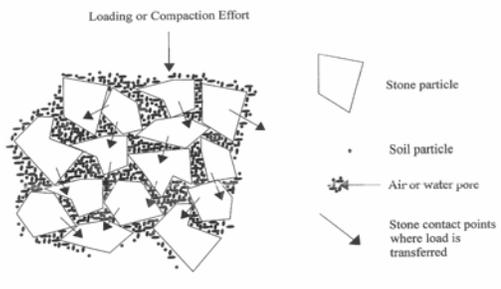
Published studies indicate that trees in urban downtown centers have an average life expectancy of 5-10 years, whereas trees in rural / more natural environments prosper and thrive for many decades! But all is not lost in despair, however!

## The Solution (and Promise)

Since its founding in 1980, the Urban Horticulture Institute (Cornell University, Department of Horticulture, Ithaca, New York) has made it part of its mission to “*develop improved technologies for assessing and ameliorating site limitations to improve plant growth and development.*”

UHI, under the leadership of Dr. Nina L. Bassuk, Professor of Horticultural Physiology, has successfully developed the concept of CU-Structural Soil™ that offers a huge promise for the future of trees in urban landscapes. The CU-Structural Soil™ (U.S. Patent #5,849,069) is a two-part system comprised of:

- \* A rigid stone “lattice” to meet engineering requirements for a load-bearing soil, and
- \* A quantity of soil to meet tree requirements for root growth.



The lattice of load-bearing stones provides stability as well as interconnected voids for root penetration, air movement and water drainage. The uniformly graded angular crushed stone specified for CU-Structural Soil™ is designed to ensure the greatest porosity.

Since among soil textures clay has the most water and nutrient holding capacity, a heavy clay loam, with a minimum of 20% clay, is selected for the CU-Structural Soil™ system. CU-Structural Soil™ should also have an organic matter content ranging from 2% to 5% to ensure nutrient and water holding capacity.

Research at Cornell has shown that tree roots in CU-Structural Soil™ profiles grow deep into the base course material, away from the fluctuating temperatures at the pavement surface. One additional benefit of this is that roots are less likely to heave and crack pavements than with conventional paving systems. (continued next page)

Planting a tree into CU-Structural Soil™ is much like conventional planting. CU-Structural Soil™ should be used at a depth of at least 24” but preferably to 36”. Supplemental water should be provided during the first growing season, as would be expected for any newly planted tree. Fertilizer can be dissolved into the irrigation water if necessary, although to date, nutrient deficiencies have not been noted.

Positive drainage below the root system is necessary, since the sub-grade below the CU-Structural Soil™ may be heavily compacted and impenetrable.

In summary, the CU-Structural Soil™ system has proven itself to be very effective in creating favorable conditions for trees to grow and thrive in urban environments. Obviously, there is an initial investment associated with this system, which pays off in the long run through the reduction of risk and maximization of tree growth.

Last but not least, the writer wishes to express his gratitude to Dr. Nina L. Bassuk for her enlightened lecture on this subject at the February 23, 2007, Chicago Botanic Garden conference on Woody Plants. Her lecture acted as an inspiration to write this article. Materials distributed during this lecture, as well as other research on relevant information, were the basis for writing this document.

Steven G. Canavis

University of Illinois Extension Master Gardener

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## Master Gardener Program Awards First 25 year Pins

It is with great pleasure that I announce the first University of Illinois Extension Master Gardeners to receive their 25 years of service pins. 25 years is a long time to commit to a project. These two volunteers go way beyond the required obligations of a volunteer. Their passion and dedication was instrumental in building the programs in both Winnebago and Boone Counties. Please congratulate Mitzi Kelly, Boone County and Paul Dennis, Winnebago County.

### Mitzi Kelly

Mitzi Kelly celebrated her 25<sup>th</sup> year of volunteer service as a Master Gardener for the University of Illinois Extension.

Mitzi has been instrumental in the development of the Demonstration Garden at the Boone County Conservation District. In addition, Mitzi has been very active in the community assisting with the Extension’s Help Desk, plant clinics, and public speaking engagements. Mitzi’s dedication and commitment goes beyond the

obligation and responsibilities of a volunteer. She is sought out for her expertise by community organizations and her fellow Master Gardeners.

Monica David, State Master Gardener Coordinator from Champaign-Urbana, presented Mitzi with her 25 year pin. Local Coordinator, Karen Durtschi, says, “Mitzi welcomes any opportunity to share her love of gardening and has exemplified the University of Illinois Extension Master Gardener mission of “Helping Others Learn to Grow”. She has been a counselor and confidant in making this program successful in Boone County. “



### Paul Dennis

Paul Dennis has achieved 25 years as an Illinois Certified Master Gardener. Paul is a wealth of experience and knowledge to the University of Illinois Extension - Winnebago County Office. He has spent his

years educating the Rockford Area community on a wide variety of topics through public speaking and presentations; he is a mainstay at the Sinnissippi Park plant clinic and is largely responsible for the diverse and unusual collection of small fruits at the Sinnissippi demonstration gardens. He has a diverse range of expertise and has always been generous with his time and talents. Paul’s knowledge includes small fruits, tree fruits, food preservation, water gardening, plant diseases, seed saving, heirloom vegetables and much more. For over twenty years Paul has propagated more than 60 water lilies per year for commercial sale as well as many marginal and floating plants. Paul works full-time, farms and still exceeds his annual volunteer hour commitment. Paul is also a Master Composter.



## Second Costa Rica Trip Added

Due to the overwhelming response for the 2008 Master Gardener trip to Costa Rica, a second trip has been scheduled. This trip will depart on January 13 and return on January 23. The trip itinerary is almost identical to the original trip and participants will enjoy the LaPaz Waterfall Garden, the CATIE Research Center, the Wilson Botanical Garden, Casa Orquideas Botanic Garden and Mrs. Teran's private garden. This trip will be hosted by Horticulture educator Barb Bates and your Costa Rican Botanist guide. Cost of the tour (includes airfare, lodging, all meals, local transportation) is \$3,195. The complete itinerary may be downloaded from the MG website at [www.extension.uiuc.edu/mg](http://www.extension.uiuc.edu/mg) Contact Mary Kroening at [hid-dentreasures@centurytel.net](mailto:hid-dentreasures@centurytel.net) /573-881-6316 or Deb Till at 573-445-3975 for more information. Do not wait as we expect the second trip to fill quickly!

Visit the Illinois Master Gardener website: <http://www.extension.uiuc.edu/mg>



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