



Imagine

Illinois Master Gardeners' Information,
News and Education

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Coordinators' Comments

The phones are ringing off the hook, wet weather this spring has increased the amount of fungal diseases we are seeing and the Japanese beetles and grubs are invading! Yikes! Hotlines and answer booths are busy right now and I know that many of you are actively answering client questions. So it is prudent to mention a few reminders about diagnosing plant problems and providing plant identification.

Number 1– Be sure of your answers before giving them out to clients. It is perfectly okay to tell a client that you don't know the answer and must do some research. No one has all the answers (even the educators and specialists) and we all need help sometimes. Be sure that you use all the resources available to prepare an accurate and complete diagnosis– the online resources, books and fact sheets in the office, the DDDI system and of course the plant clinic. Only research-based recommendations for management of problems should be given to clients. Most offices have a tracking system in place to be sure that calls are answered correctly and in a timely fashion. If you don't have a system in place– work with your county staff to develop one (a good off season project!). Don't let client questions sit around for days waiting to be answered. Clients lose confidence in our abilities when we make an inaccurate diagnosis or don't get back to them in a timely fashion. The Hort team is working on instructions for contacting educators if you need help in diagnosis. This should be released very soon. Remember that a physical sample should be submitted via DDDI or to the plant clinic for diagnosis.

Number 2– Remember that Master Gardeners only work with home gardener questions. Possible pesticide drift, storm injury, food safety, tree injury and commercial questions ARE ALWAYS referred to an educator.

Number 3– Interns should be paired with veteran Master Gardeners on the hotlines until they are comfortable and confident about their answers.

Number 4– Potential pesticide drift problems need to be handled very carefully. These cases could result in litigation and need to be referred directly to an educator and/or the Plant Clinic. Many specimens submitted recently to the Plant Clinic have been sent as suspected herbicide drift or environmental problems. Educators and state specialists along with the Plant Clinic play a major role in diagnosing injury symptoms. Typically this involves ruling out pest, environmental or nutritional problems and often ruling out specific classes of herbicides. This type of information is often useful in settling disputes informally. Through informal mediation, many pesticide drift complaints are resolved before a written complaint is submitted to IDOA or a civil lawsuit is filed. Keep in mind that the Plant Clinic does not perform pesticide residue tests and without such tests, the cause of symptoms cannot be attributed to pesticide drift with 100% certainty. It is possible however for clinic staff and specialists to rule out other possible causes and establish whether the likely cause is drift.

The Illinois Department of Agriculture has several roles in investigating drift complaints. These roles are: the education of applicators via PSEP training; investigation of complaints and enforcement of pesticide laws. If educators, specialists or the Plant Clinic determine that drift is a likely cause they will contact IDOA. Complaint forms must be received by IDOA within 30 days of the incident or within 30 days of when damage was first observed. An investigator will be assigned the case and he or she will do interviews, collect samples and send them to an approved lab, collect weather data and review pesticide records. The field investigator will then submit a report to the department for review.

In conclusion, suspected drift problems need to be referred in a timely fashion to an educator and samples sent to the Plant Clinic. Following the simple rules I have discussed will assure that we are giving our clients the best service while also protecting our volunteers against liability concerns.

 Monica David, Illinois Master Gardener Coordinator

New Disorder of Spruce in Illinois

The University of Illinois Plant Clinic has received spruce samples from both central and northeastern Illinois that have been diagnosed with Sudden Needle Drop (SNEED) caused by *Setomelanomma holmii*. While SNEED has been found in several surrounding states, this is a first find in Illinois. We are pursuing independent identification since this is a first find as well as proceeding with qPCR analysis for verification.

SNEED has been found on Norway, white and Colorado blue spruce trees. Symptoms of SNEED are yellowing and eventual browning of older needles. Typically, by the end of summer, all of the needles on affected branches fall off except the newest needles on the tips of the branches. Symptoms noticed in the spring were nearly defoliated branches that may still have a few brown or half brown needles attached or no old needles and just new bud growth. Branches affected by needle drop may be scattered throughout the tree or the entire tree may be affected.



Unlike our other common fungal needle cast diseases the fungus doesn't produce fruiting structures on the needles. While spruce needles don't show signs of fungal infection, the twigs will have numerous small black fruiting structures (pseudothecia). They are not lined up in any particular pattern.

Although, the fungus is found infecting symptomatic trees there is still a question whether it is a pathogen. It may indeed be a pathogen or may simply be a fungus taking advantage of a tree stressed by drought, heat, poor planting or other environmental factors. To help with field diagnosis for sampling, note that SNEED fruiting structures will not be on the affected needles. If you do see fruiting structures on the needles of a symptomatic spruce, you are most likely looking at either *Stigmina* or *Rhizosphaera* or another fungal needle cast. A tree can have just one of these needle casts or two or more.

Management recommendations are sparse; Bruce D. Moltzan of the Missouri Department of Conservation indicates that fungicides for control of *Rhizosphaera* needle cast can provide control in nurseries and smaller landscape trees.

 Suzanne Bissonnette,
Plant Diagnostic Clinic and IPM Coordinator

Free iPhone Application Identifies Tree Leaves

A new iPhone app called LeafSnap is a field guide for tech-friendly naturalists. It can identify a tree's species by analyzing a photograph of its leaf. Point your smartphone's camera at one of nature's solar cells (laid out flat on a white piece of paper) and the app will go to work. It separates the leaf from the background, and then analyzes the leaf's shape. The algorithm, designed by facial recognition experts at Columbia University and the University of Maryland, gets measurements from numerous points along the leaf's outline. These are then compared to an encyclopedic database of leaves—kindly donated by the Smithsonian Institution and non-profit nature-photography group Finding Species—to give you a result.

If it isn't completely sure, it will show you an entire collection of possible leafy matches. You can then look at more information on those trees—finding out where they grow, what time of the year their flowers bloom and pictures of their fruits, seeds and bark—to make a proper decision on what type of leaf you've got in front of you. The app also has a dabble in citizen science. Once you've correctly labeled your leaf you can tap "label," which uploads your data to a community of scientists.

Your data will be geo-tagged to your current location, letting flora experts map and monitor the ebb and flow of different trees. Unfortunately for nature geeks (or shape recognition nerds) you'll probably have trouble getting the app to identify Illinois native leaves. LeafSnap currently includes the trees of just New York City and Washington D.C. A full rollout covering the United States is planned.



Corpse Flower Due to Open Soon

The *Titan arum* in the U. of I. Conservatory is due to flower this week. This plant has one of the largest inflorescences and only blooms about every 10 years. Our "Titania" was received as a seed from the U of Wisconsin in 2001 and the corm can reach up to 200 pounds. For information about "Titania" go to this website: <http://www.life.illinois.edu/plantbio/greenhouse> We anticipate the inflorescence to be fully open around July 15th and it will only last for about 48 hours. It will release an odor like rotted meat which serves to attract flies as pollinators. Check the website above for a webcam of the corpse flower.

Garden Photo Contest

Horticulture magazine and DavesGarden.com are sponsoring a Garden Photo Contest and you might be interested in submitting some of your photos! We know you are dedicated to the creation and maintenance of fine garden spaces. This contest is an opportunity for you to share your botanical interests to a wide audience (and possibly win money!)

The grand prize is \$1,000! The winners and runners-up will be featured in print with *Horticulture* magazine and online at HortMag.com and DavesGarden.com.

They will also win a one-year subscription to *Horticulture magazine* and DavesGarden.com

You may submit photos on this website:

<http://www.hortmag.com/gardenphotos>

2011 National JMG® Specialist Training

This dynamic and intensive 2 1/2 day training conference will be held September 15-17 in Denton, Texas. It is designed for those who coordinate or support JMG programs at the local, county or regional level. Learn new techniques that will help you implement effective youth gardening programs through JMG. All attendees completing the JMG Specialist training conference will receive certification as a JMG Specialist by the national JMG program office and a host of invaluable resources to grow JMG and youth gardening programs in your county. For registration and more details visit - <http://dcmga.com/events/2011-JMG-specialist/>

IPM³ Program in Pest Management

IPM³ is a consortium of federal agencies and land grant institutions dedicated to delivery of practical pest information so that practitioners (including MGs) can use IPM in their day to day pest management decisions. The courses cover a range of topics including core concepts; pest biology-plant pathology; pest biology-weeds and invasive species. All modules and courses will be delivered online and asynchronously. Each module will be given a specific start and end date. The end date will be six weeks from the course start date. Courses will be offered this fall and also in January. These are very comprehensive modules and require about 6–15 hours to complete. Registration for the fall and winter courses are now open at www.umn.edu/ipm3

Build a Bond with Birds

Whether in a shrub, a tree, or a nest box, bird nests are all around us. By monitoring a nearby nest you can help scientists study the biology of North America's birds and how it might be changing over time. Every spring and summer, volunteers

from across the country visit nests and report their findings to the Cornell Lab of Ornithology's NestWatch program. As a Nest-Watcher, you keep tabs on bird family life, following the progression from incubated eggs, to fuzzy chicks, to gawky youngsters ready to take their first flutter-



Eastern Bluebird nest.
Photo by J. Brindo

ing flight. All the information you gather is submitted online to the NestWatch database.

“NestWatch helps people of all ages and backgrounds connect with nature,” says project leader Jason Martin. “The information that our dedicated citizen scientists collect allows us to understand the impact that various threats, such as environmental change and habitat destruction, have on breeding birds. Armed with this knowledge, we can take the necessary steps to help birds survive in this changing world.”



Eastern Bluebird chick hatching.
Photo by Mary Thomson

Instructions and all the materials you need to participate are available on the NestWatch website at www.nestwatch.org. You'll also get directions on how to find and monitor nests without disturbing the birds. It's fun, it's easy, and it's free.

The Cornell Lab's immensely popular NestCams are back too. Cameras broadcast live video over the web from the nests of Barn Owls, bluebirds, wrens, Wood Ducks, and many other species. Our newest camera is focused on a Great Horned Owl family in Houston, Minnesota. Check it out at www.nestcams.org.

Costa Rica 2012

Gardens, Rainforest and Wildlife

Join fellow gardeners as we explore the rich diversity of Costa Rica. This tour is being offered on February 13-21, 2012 for Illinois Master Gardeners, their families and friends. The tour will include onsite visits to private gardens, wildlife and rainforest preserves, national parks, local farms and botanical gardens, all while surrounded by mountains or the picturesque Pacific Coast. Costa Rica has a tremendous natural diversity of plants and animals and this trip promises to immerse you in a botanical paradise. This eco-tour will put us in out of the way places and walking trails may be rough or steep and there is always the chance of encountering exotic insects or snakes.

The itinerary begins in San Jose, the capitol of Costa Rica which is nestled in the central valley. Our first stop will be Costa Flores to visit their lush tropical gardens, then on to the Sarapiquí region. In this area we will visit the Corsicana



pineapple plantation and then La Tirimbina reserve where we will hike through the rainforest and visit an organic cacao plantation to make and eat our own chocolate. On day four we stop at the magnificent La Paz Waterfall Gardens to see lush tropical rain forest, flowing white rivers, spectacular waterfalls, birds, butterflies, monkeys, sloths, snakes, frogs and more. The next day is highlighted by a visit to the Else Kientzler Botanical Garden and the private garden of Ligia Cooper. On our way to the Pacific coast we will visit Villa Vanilla for a sensory journey to smell, touch and taste many different spices. On the coast the group will visit Manuel Antonio Park and have free time to enjoy our oceanside resort. As we head back to San Jose we will visit the Orchid Garden and then conclude with a visit to the private estate of Ileana Teran.

The trip is priced at \$2690 per person, double occupancy. A \$1000 deposit is required with your registration form. Airfare is not included– you may find your own airfare or Hidden Botanical Treasures Tours will assist you. For more information or to book your trip contact mary@hiddentreasuresbotanicaltours.com The full trip itinerary and registration form may be found on the Illinois Master Gardener website.

Introduction to Diagnostics for Master Gardeners - Online Module

“Introduction to Diagnostics for Master Gardener Volunteers: Approaches to Plant Pest Diagnostics” is a new online module available for Extension Master Gardeners through eXtension. Sponsored by the North Central Consumer Horticulture working group (a group of extension specialists and Master Gardener coordinators from the twelve states in the North Central region), this course is now available for Extension Master Gardeners to take as continuing education for a \$10 fee. It is a self-paced course and Master Gardeners have ten weeks to complete the course. Participants will earn a certificate for 3 hours of continuing education credits when the course is complete (check with your local Extension Master Gardener coordinator to suggest that they include this class for education hours in the Illinois volunteer reporting database.)

Denise Ellsworth and Sarah Ellis of Ohio State University have assembled this course on behalf of the North Central Consumer Horticulture working group to offer Extension Master Gardeners some guided help to enhance their plant diagnostics skills.

The course has several course components:

- Narrated PowerPoint presentations
- Handouts
- Fact sheets
- Certificate worth 3 continuing education

Visit the eXtension website, campus.extension.org and set up an account using the "Create an account" link on the left side of the page. It's free, easy and secure. Once you have that account created (you will receive an email with confirmation and a password), log into the eXtension site, scroll through the available course categories and select Master Gardener. Then select “Introduction to Diagnostics,” and pay for the course (\$10). Once payment is complete, you can view the course website and get started.



Conference 2011 a Huge Success

Thank you to the Master Gardeners from Champaign, Ford/Iroquois, McLean and Coles Counties who helped to make conference 2011 a big success— those who worked registration, led tours, worked the silent auction, hosted classes and designed the decorations. Over 250 Master Gardeners and staff attended this years conference. Although the weather was “toasty”, attendees were all troopers and enjoyed the tours of natural areas, university gardens, the greenhouses, the energy farms, the student farm and much more.

Thanks to all of our corporate sponsors for their silent auction and goodie bag donations. A big thank you to Judith Liebman for her donation of the bronze sculpture of “Great Blue Heron” by James Swanson valued at \$1950. Although this lovely sculpture did not sell at the auction, I hope to find a buyer for it very soon.

Thanks to all the Master Gardeners and counties who donated items for the silent auction. **The auction raised about \$2,200 for Master Gardener projects.**

2011 Sustained Excellence Award Winners

Sandra Bidner	Carlock, McLean County
Vicki Clark	Arcola, Douglas County
Glennie Hamel	Mattoon, Coles County
Kathy Hasselberg	Peoria, Peoria County
Nancy Hebb	Canton, Fulton County
Sharon Jaeger	Bloomington, McLean County
Wayne Mundsinger	Oswego, Kendall County
Ron Peabody	Genoa, DeKalb County
Shelley Schultz	Stanford, McLean County
Jackie Trotter	Canton, Fulton County
Robin Vandermay	Bloomington, McLean County
June Vandervest	Downers Grove, DuPage County
Janice Weber	Sycamore, DeKalb County
Shirley Wilson	Springfield, Sangamon County

The Return of the American Chestnut

Until Chestnut blight was introduced into this country in the twentieth century, the majestic American chestnut was a king of the eastern deciduous forest. Now after decades of research, scientists are optimistic that they are close to a solution. The American Chestnut Foundation (TACF) has developed new hybrids by crossing the sturdy genes of American chestnuts with blight-resistant Chinese chestnuts and these new hybrids are being introduced to forests and city parks in the plants original native range. This backcrossing has created a tree that is 93.75% American Chestnut. Other groups are working to save the chestnuts as well including the American Chestnut Cooperator’s Foundation (ACCF). Lucille Griffin, executive director of ACCF and her husband Gary have found that there may be several types of blight resistance and success may depend on combining two chestnuts with the same kind of blight resistance.

Chestnut researchers are also working with biological controls such as viruses. In addition there are also other threats to the American chestnuts including ink disease, a root blight, gall wasps and environmental challenges such as deer or weather extremes. Guy Sternberg of Starhill Forest Arboretum in Illinois feels that the future of the chestnut may lie outside their original range where the blight has not penetrated. The largest stand of American chestnuts outside the native range is in LaCrosse, Wisconsin and is believed to be planted in the late 1800s. Blight was found here in the 1980s but the trees have since been treated with the blight attacking virus.

The American Chestnut Foundation sells pure chestnut seedlings and gardeners can plant them to preserve the genetic stock. In time the trees will die of blight but the trees grow quickly and will bear nuts within three to five years. TACF also provides restoration chestnut seeds to contributing sponsors. They have established a system of state chapters and they cooperate with the U.S. Forest Service, the National Park Service and universities and arboreta. The power of volunteers in re-establishing the American chestnut cannot be overstated.

Here are some helpful websites to learn more:

TACF- www.acf.org

ACCF- www.accf-online.org

American Chestnut Restoration Project-

www.fs.fed.us/r8/chesnut

Chestnut Growers of America- www.wcga.net

Ross, Marty. The Return of the American Chestnut. *The American Gardener*. American Horticultural Society. May/June 2011.

2011 Teamwork Award Winners

Sand Ridge Interpretive Gardens-Cook South Suburban Unit

Master Gardeners worked with the Sand Ridge Nature Center to renovate the existing vegetable garden. Themed gardens were planned in two new areas focusing on best practices for home gardeners. The volunteers created a new entrance, the Calumet Garden with natives and pollinators, a Modern Pizza garden, the Dune Garden and the Pioneer Settlers vegetable and herb garden.

A Winter Day in the Garden-Crawford County

This annual event is the highlight of the winter season in EC Illinois. This group of Master Gardeners secures top notch national speakers- with help from a local tourism grant. The event is held in cooperation with the local community college and has an annual attendance of 365 plus.

Home, Lawn and Garden Day-McLean County

Over 65 Master Gardener made this event a true success and an educational showcase for central Illinois. This one day event showcased over 30 sessions with topics ranging from landscaping to birdscaping to controlling moles. Community Horticulture professionals gave 15 presentations and 17 talks were given by Master Gardeners.

In 2010, there were 234 attendees from all over the state.

Bird Garden in Oak Hill Assisted Living Center Alzheimer's Unit-Monroe County

Master Gardeners met with staff and patients and quickly realized that bird watching was a priority for the patients. The 7 member team designed and planted two courtyards with native trees, shrubs and flowers to attract birds. Herbs and vegetables were incorporated to use in meal preparation.

Western Avenue Greenway-Peoria County

This project involved renovating the Greenway to provide a park-like setting for nearby neighborhoods and increase involvement of homeowners. In 2010, 75 4th graders planted beans in the West Bluff garden rototilled by the Three Sisters Antique Tractor Club. A Girl Scout troop planted potatoes and ICCC students planted a tree.

This project was spearheaded by the 2008 MG interns.

Flower and Garden Show-Rock Island County

The Master Gardeners created a showplace garden with compost bin, raised bed vegetables gardens and ornamentals for the annual Flower and Garden show. Their exhibit also included an informational booth and Hort Hotline for the over 5000 attendees.

Illinois Executive Mansion Vegetable Garden-Sangamon/Menard Unit

Youth from the 21st Century Program and nine Master Gardeners created a vegetable garden at the governors mansion. Along with gardening lessons the youth learned about nutrition and preparing fresh vegetables. Seeds, plants and materials were all donated from local agencies and clubs.

Native Plants Demonstration Garden-Stephenson County

This project was a partnership with the Stephenson County Visitors Bureau to create an aesthetically pleasing and educational garden. A water resistant labeling system and table top display were created. A native plants demo garden and rain garden were installed and both are used for many educational programs.

Plant Bingo-Tazewell County

This project uses a unique approach to teach the public about horticulture thru use of a plant bingo game. Game cards include plant ID and information and winners are awarded a plant. An information table provides great resource for attendees.

2010 Annuals Evaluation Garden-Will County

The trial garden located at the Midwest Golf House in Lemont is a source of ideas and inspiration for the green industry and the public. Master Gardeners evaluate horticulture performance of 200 cultivars in the garden and make this information public online.

Gardening for Food and Fun-Winnebago County

2011 was the 34th year for this event which provides horticulture, gardening and natural resource information to over 200 annually. With nationally recognized speakers, 21 topics and cutting edge topics the draw for this event is obvious.

Eureka Public Library District Cooperative Partnership-Woodford County

This team of volunteers worked with the library district to create educational programs- 6 plant clinics, 9 telenets and 10 presentations in 2010 alone. Their annual plant sale is held in conjunction with the library book sale. These events have increased publicity for the program and Extension.

Visit the Illinois Master Gardener website: <http://web.extension.illinois.edu/mg>

2011 Outstanding Master Gardener Award Winners

Kent Ackerman	Moline, Rock Island County	David Kiliman	Springfield, Sangamon County
Margo Ackland	Mt. Morris, Ogle County	Connie Kostele	Pontiac, Livingston County
Phil Adams	Peoria Heights, Peoria County	Chris Kraft	Bloomington, McLean County
Linda Anderson	Crestwood, Cook South Suburban	Deb McFarling	Moweaqua, Macon County
Connie Austin	Rockford, Winnebago County	Terry Meade	Canton, Fulton County
Patrick Beckman	Quincy, Adams County	Ellen Meyer	Bartlett, DuPage County
Bonnie Bernholdt	Elk Grove Village, Cook North Suburban	Norm Meyn	Peoria Heights, Peoria County
Paul Brady	Philo, Champaign County	Janet Miller	Mt. Vernon, Jefferson County
Linda Clevenger	Mt. Vernon, Jefferson County	Mary Morris	Champaign, Champaign County
Anne Copeland	Palatine, Cook North Suburban	Kathy Mundell-Bligh	Bloomington, McLean County
Claudia Dewitt	Hoopeston, Vermilion County	Laurie Nestor	Dolton, Cook South Suburban
Sue Farrell-Stroyan	Bloomington, McLean County	Gary Patton	Bolingbrook, Will County
Penny Feehan	Bloomington, McLean County	Sue Paulin	Rochelle, Ogle County
Kathryn Fletcher	White Heath, Champaign County	John Reardon	Charleston, Coles County
Juanita Gammon	Champaign, Champaign County	Cheryl Sappington	Mt. Zion, Macon County
Nancy Hammer	Wauconda, Lake County	Patty Stoffel	Gifford, Champaign County
Barbara Hedden	Springfield, Sangamon County	Betty Stogner	Northbrook, Chicago Botanic Garden
Judy Hines	Bloomington, McLean County	Gretchen Strauch	Washburn, Woodford County
Marijean Hislop	N. Barrington, Lake County	Corinna Walker	Elmwood, Peoria County
Linda Johnston	Bloomington, McLean County	Joan Walters	Springfield, Sangamon County
Bob Keene	Astoria, Fulton County	Joyce Wells	Springfield, Sangamon County

