The big chill

By Rosie Lerner, Extension Consumer Horticulturist

When winter temperatures dip below zero and winds howl across the prairie, gardeners may worry that their trees and shrubs are taking a beating. No need for doom and gloom yet—most hardy landscape and orchard plants are reasonably able to cope with most of our winters, including our recent polar vortex.

Many factors influence plant injury, including plant species and cultivars, degree of plant dormancy and overall plant health. How low the temperature goes, how long it stays there and how well acclimated plants are at the time are additional factors.

Much of Indiana spent two or three days with subzero temperatures and high winds. While it is too soon to know how much damage to expect, the good news is that plants were fully dormant prior to this episode. Snow cover is a big help, too, providing considerable insulation.

The severe lows coupled with high winds may cause some dieback of twigs and winter burn on ornamentals, especially evergreens. Broad-leaved evergreens are the most susceptible. Winter desiccation injury occurs when absorption of water by the roots cannot keep up with moisture lost by the foliage (transpiration). This occurs mainly on sunny days, especially if it is windy and the soil water is frozen—the plant can’t absorb it—or if water is in short supply. Injury appears as brown leaf margins or needletips at the onset of warm weather.

(continued on page 3)
“It was a dark and stormy night.” No, it wasn’t! But it was getting dark early on January 28, and the night was very cold at 6:00 p.m. at a brisk 12° but with no storms and no winds, as 71 Master Gardeners and interns piled into the classroom at the extension office. See Susan Lovell’s article for the names of the refreshment committee members who did an outstanding job of providing warm drinks and excellent finger foods. Coats piled up in the hallway and conversation filled the room.

Penny Austin’s education program was titled, *How to Grow and Use Sprouts to Maximize Your Health and Vitality*. Laughter is also good for your health, and there was plenty of that. Penny, and the short videos she incorporated into her remarks, taught us how to take seeds, legumes, and nuts, rinse them a couple of times under the tap, and like magic, grow sprouts. There’s a tiny bit more to it than that, but not much. She advised that nuts will not ‘sprout’ in the traditional sense, but the chemical transformation takes place anyway before she dries them in a slow oven. Everyone agreed they were delicious. She brought numerous jars of sprouts from her kitchen and invited everyone to taste the differences in the seed and legume sprouts. She introduced us to chia seeds and their nutritional properties, as mixed with orange juice. And she surprised us with a delicious brownie that substituted black beans for white flour. Maybe she’ll share the recipe. Check out photos of Penny’s program and her sprouts on Facebook!

Paula Perron introduced members to the new Master Gardener Garden Tips and Recipes cookbook being planned. Watch for instructions for submitting your recipes from last November’s Harvest Dinner.

Nancy White provided an update on the 2014 Garden Fair and introduced some of the committee chairs. If you want to participate in this fun event, are looking for volunteer hours, or just want to answer the call for help, contact Nancy. There are openings available at the Garden Thyme Café on the 8:00-11:00 a.m. and 2:00-5:00 p.m. shifts. If you can work at the Café, contact me at ear4841@comcast.net.

Please put ‘baking’ on your calendar for the first week of April. The Café depends on your generous contributions of fruit pies, brownies, and nut-free cookies. They are popular items with the visitors—especially those spring-thyme rhubarb pies.

Check out our webpage at www.mcmga.net for upcoming gardening events in the area and for a direct link to our Facebook page, issues of *Roots and Shoots*, and other information. Speaking of upcoming events, anyone wanting to carpool to the 7th Annual Spring Tonic on March 1 in Paoli can contact me.

Earlier this week the audit committee of Mary Cusak, Tom Lovell, and I met to re-view the MCMGA financial records and found them in good order. We also partici-pated in the webinar titled *Strengthening Nonprofits Through Effective Management*, provided by Purdue Extension. Moderator John Orrick kept the focus on Master Gardener issues. It was very informative, even eye-opening. Thanks, Amy, for the opportunity.
Local Growers' Guild bulk order program
Submitted by Amy Thompson

The LGG bulk order program for farm/garden supplies, cover crops, and amendments is open to gardeners, farmers, and community organization members and non-members alike. Non-members are assessed a $10 fee or can join the LGG before they order. Participants have reduced costs between 5%-15% each year that the program has been offered. The last day to order is February 20.

Submit your order at https://www.surveymonkey.com/s/lggbulkorder.

MCMGA Grants available
By Nancy White

The 2014 MCMGA grant application is on our website currently, and applications may be turned in to the Extension Office until March 1. Grants are awarded each year to non-profits who need support for a new or existing horticulture project. Funded by the proceeds from the Garden Fair, grants have, in past years, funded projects for youth education, family gardening experiences, historical demonstration gardens, senior citizens’ accessible gardens, a rooftop garden, and the removal of invasive species at the Monroe County Courthouse, among other projects.

Consider applying for one of the grants for a non-profit project that you support or lead. Or encourage your friends and neighbors to apply. For more information, check out the link to the application on our website or contact a member of the MCMGA board. Grant winners will be announced by April 1.

The big chill (continued from page 1)

Generally, flower buds are more sensitive to cold than leaf buds, so flower buds on some fruit trees such as peaches, nectarines, and sweet cherries could have been damaged. However, it is very likely than some flower buds will survive, enough for at least a partial crop. Blackberries, blueberries and grapes may also have significant bud loss, particularly on more tender cultivars. Species that are marginally hardy will likely suffer dieback, or possibly death, but this may not be obvious until spring thaw. You might want to delay major pruning until after winter damage can be assessed.

There is still plenty more winter to endure before we will know the status of our plants. There’s not anything you can do to control the weather, so stay safe and warm and dream of warmer days to come!
The 2014 Garden Walk Committee is looking for a few nice gardens! This year MCMGA will visit gardens and, hopefully, experience some educational outcome. However, there will not be a picnic. The survey results said, “No picnic.” Please email Mary Jane Hall (gardenz4ever@hotmail.com) or call her (812-345-3985) if your garden or a Master Gardener’s garden that you know of has potential. Small gardens are easier to visit this year since we do not need to accommodate a lot of seating. If you are doing something different in your garden, the rest of the members will be interested! We’d love to explore your microclimate, environment, and/or collections. If you have tried new hardscape (even if someone else did the labor), we would love to see it.

We will all enjoy seeing the green in a couple of month. May we see yours?

January general meeting

Thanks to all who braved our bitter cold to attend our general meeting on January 28. We were all rewarded with an entertaining, fun filled, and informative evening with Penny Austin. Penny is a retired kindergarten teacher, and she reached in to her bag of tricks to educate us about the benefits of growing and eating sprouts both for health and for taste. Special thanks to our wonderful Master Gardener cooks who served terrific refreshments. Angie Fender volunteered to not only bring her own delicious, healthy snacks but also to coordinate the treats provided by Mary Hoffmann, Connie Clark, Mary Cusack, Paula Perron, and Tom Lovell.

Our next meeting on March 25 will again be held at the extension office at 6:30 p.m. Our presenter will be Marie Fleming, certified permaculture designer and teacher. Her topic is Seed Collecting, Saving and Starting—a timely topic as we approach spring. Refreshments will be available at 6:00 p.m. so we will have some social time prior to the start of the meeting. The March refreshment committee includes Mary Hoffmann, Mary Cusack, Jessica Wilson, Donna Terry, and Tom Lovell.

If you didn’t have the opportunity to sign up to help with refreshments on March 25, please contact me at smlovell@indiana.edu. Volunteers are always welcome.

As always, we can use extra hands to help in setting up for the meeting and cleaning up afterward. If everyone pitches in, the work is done quickly. See you there!
“It takes a village” to successfully plan and implement our annual Garden Fair, our gardening gift to the community. The 2014 Fair will celebrate five years of providing the public opportunities to visit helpful commercial vendors and local non-profit agency booths, attend free garden-related classes offered all day, and make contact with other local gardeners.

As a member of the MCMGA or as a member of the 2014 intern class, here are some things you can do to assure this is our best year ever.

Sign up to be on a committee.

Save your old and slightly used garden catalogues and bring them to the March 25 meeting or to the Garden Fair. The MG Information Booth will give these away to our visitors.

Spread the details of the Garden Fair to all your friends and neighbors. See our webpage for current updates. If you have a Facebook page, please list the Garden Fair as an upcoming activity.

Tell any of your favorite landscaping/garden stores/nursery owners that it’s not too late to register as a Garden Fair vendor. A link to the application is on our website.

Offer to put a yard sign on your property or hang a poster at your workplace, business, or church. Both yard signs and posters will be available at our March 25 general meeting or contact Nancy White if you need the posters sooner. Yard signs cannot be placed until March 30 due to city restrictions.

Work on April 5 if you can and be sure to walk around and visit all the booths.

IMA presents annual horticulture symposium

IMA’s day-long horticulture symposium, *Smaller Garden—Bigger Impact*, on Thursday, February 6, from 8:00 a.m. to 4:30 p.m., brings together regional and national experts to discuss the challenges and joys of gardening in smaller spaces. Suitable for the novice gardener as well as the professional designer, topics include plant selection, intriguing perennials, and special design considerations for these new spaces.

Featured Speakers include C. Colston Burrell, Jo Ellen Meyers Sharp, Lee Reich, and Vincent Simeone.

For additional information, see [http://www.imamuseum.org](http://www.imamuseum.org).
Hearing about the trying winter conditions recently in the deep South brought back memories of a very special trip to the North Carolina Botanical Gardens at Chapel Hill last summer. The gardens are located in a developing residential off-campus area that was once a private estate. Nine hundred acres, deeded to the University of North Carolina in 1952, are divided into several micro-areas such as the piedmont, coastal plain, and mountains. These natural habitat gardens mirror the great variety of native plantings found in specific areas of North Carolina. Administered and tended by faculty and university students (the university offers several degree programs in horticulture, including horticultural therapy, native plant studies, and botanical writing and drawing), various community groups provide necessary labor to keep the site lush yet orderly. The day we visited, a group of Master Gardeners were re-planting at the front entrance and along the walkways.

Although we visited in late July and many perennials and shrubs had already bloomed, there were still many making an amazing show. Some favorites were the perennial border of several acres and the Garden of Flowering Plant Families. Here we found a visual representation of the evolutionary relationships between plant groups. An example in this unique area was the planting of tomatoes, peppers, tobacco, and petunias—all from the same family and growing side by side.

The coastal plain habitat we visited was low and marshy with boardwalks connecting the swamp oaks, long-needle pines, grasses, and numerous ponds. Although we were prepared with hats, netting, and bug spray, we met a few gnats and flies but not one mosquito! Perhaps they have all been sent to the Midwest? Other areas to include in a visit are the herb garden, children’s wonder garden, plant propagation center, and the rare plant section which includes a large display of carnivorous plants.

The plantings in all areas are identified with stakes, and visitors are provided with a very detailed map of each section. There is a small entry fee, and a snack bar and gift shop with interesting books and gift items are on-site. According to the ample literature provided, many educational classes are held weekly at the gardens and school, and public tours are available.

This is a trip worth taking when you are in the area. You won’t be disappointed.

Hats off! New badge: Lynn Courson—certified Congratulations!
Attention Master Gardeners! Remember how good each dish tasted at our annual Autumn/Holiday Dinner last November?

A committee has volunteered to gather all those good recipes into a book called *Master Gardeners Garden Tips and Cookbook*.

Please contribute the recipe for the dish you brought to the dinner. If you weren’t there, please send your favorite recipe.

In addition to the recipe, the Master Gardener board would also like for you to share gardening tips. Amy will review the tips to be sure they are research-based, meet Purdue and Master Gardener guidelines, and are in compliance with EPA recommendations or have been identified as anecdotal evidence. Finally, please identify which ingredients in the recipe were grown locally, such as actually grown in your garden or were bought from a local source.

Don’t delay. This is how to send your recipe:
1. Start by giving the name of the dish as well as your name.
2. Copy your recipe clearly by typing it as a part of your email or as an attachment. No PDFs, please.
3. Add a small paragraph with instructions/ideas/for what to serve with your dish.
4. Follow the same format for submitting your garden tip.
5. Send your recipe and garden tips to mgrecipebook@yahoo.com.

Our goal is to sell the book, *Master Gardener Garden Tips and Cookbook*, to you at cost, possibly $5, and then to the public during the 2015 Garden Fair.

Yes, we are starting early, but we still need your recipe as soon as you can get it to us.

**GardenFest and Pansy Sale on March 14**

The Morgan County Master Gardeners’ annual GardenFest and Pansy Sale will be held at the Hoosier Harvest Church, 4085 Leonard Road (just off Hwy 252), Martinsville, Indiana on Friday, March 14 from 1:00-8:00 p.m. and on Saturday, March 15 from 9:00 a.m.-4:00 p.m. Beautiful pansies and violas, which have been grown just for this event, will be sold at $4/pot or $22/flat containing six plants. Over 30 vendors will feature garden-related merchandise; free tree seedlings will be given away; and free garden seminars will be given throughout both days.

Food and drink will be available for purchase. Admission is free.
Editor’s note: This is Dianne’s final column. Her observations on nature have been a pleasure to read each month. Dianne plans new adventures.

It’s been a lot of fun writing about plants over the past year. As I’ve done research for this column, I’ve come to one conclusion—plants are truly amazing. And the more I learn about them, the more amazing they appear, from the intricate details of photosynthesis to their clever mating strategies. Since a column like this can barely scratch the surface of the world of plants, I’d like to bring my column to a close with a list of books that will guide you in further exploration.

If you’re interested in photosynthesis—the basis of all life on earth—Oliver Morton explains it in *Eating the Sun: How Plants Power the Planet*. This book is for everyone, even people like me who left science behind in high school. It’s entertaining and informative at the same time, telling stories about the people who figured out how photosynthesis works as well as giving a grand overview of how it has shaped the world.

If you’re up to a little work, *Plants: Diversity and Evolution* will repay your effort. Plants evolve at a pace that far outstrips animals. This book talks about how plants do it and the resulting diversity of nonflowering and flowering plants in gardens and grasslands and forests, deserts and tundras. If you want to be introduced to all kinds of plants, this is the book for you.

Steven Vogel’s *The Life of a Leaf* focuses on the most obvious part of plants and explores a leaf’s problems—intercepting light, not overheating, not being too draggy, getting water up. As he explains each of these, he expands our view of what is going on within all the green that fills our gardens.

What is a tree? In *The Tree: A Natural History of What Trees Are, How They Live, and Why They Matter*, Colin Tudge calls it a big plant with a stick up the middle. But if smaller plants have to keep their leaves in the light and raise water against gravity, imagine doing it all when you’re thirty feet tall and can’t send parts of yourself inching along the ground. Tudge has written many books about biology, and all of them are a delight. He combines the scientific and the poetic as few other writers have about the natural world.

If you want to do something about your animal-centric world view, Francis Hallé’s book, *In Praise of Plants*, will do the trick. The life of plants is hard for us to understand and appreciate. Most of the science we’ve learned in school is centered on how animals solve the problems of being alive. Plants go about things in such a different way that we tend to see them as simple and boring. If you like science fiction or tales of aliens, Hallé will show you a world stranger than any of the stories you’ve read. And it’s real.

Finally, although it isn’t about plants, Jon Young’s book *What the Robin Knows: How Birds Reveal the Secrets of the Natural World* will deepen your awareness of and connection to the animal residents in your garden by teaching you to tune in to the garden’s sentries—birds.

I wish you all happy reading and happy gardening. Stay amazed!
## Volunteer opportunities

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Jobs</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hilltop Gardens</td>
<td>year around</td>
<td>various</td>
<td>Charlotte Griffin, 345-8128</td>
</tr>
<tr>
<td>MG Demonstration Garden</td>
<td>seasonal</td>
<td>various</td>
<td>Herman Young, 322-5700</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Jeanie Cox, 360-3587</td>
</tr>
<tr>
<td>MCMGA Garden Walk Committee</td>
<td>year around</td>
<td>select gardens and plan picnic</td>
<td>Evelyn Harrell, 339-0572</td>
</tr>
<tr>
<td>Bloomington Community Orchard</td>
<td>seasonal</td>
<td>various</td>
<td>Stacey Decker, <a href="mailto:getinvolved@bloomingtoncommunityorchard.org">getinvolved@bloomingtoncommunityorchard.org</a></td>
</tr>
<tr>
<td>Cheryl’s Garden at Karst Farm Park</td>
<td>summer</td>
<td>design and maintain</td>
<td>Linda Emerson, 345-2913 (cell)</td>
</tr>
<tr>
<td>T. C. Steele SHS</td>
<td>seasonal</td>
<td>various</td>
<td>Davie Kean, 988-2785</td>
</tr>
<tr>
<td>Flatwoods Park Butterfly Gardens</td>
<td>seasonal</td>
<td>various</td>
<td>Cathy Meyer, 349-2575</td>
</tr>
<tr>
<td>MCMGA Horticulture Hotline</td>
<td>year around</td>
<td>inquiries &amp; research</td>
<td>Amy Thompson, 349-2575</td>
</tr>
<tr>
<td>MCMGA Speakers Bureau</td>
<td>year around</td>
<td>various</td>
<td>Amy Thompson, 349-2575</td>
</tr>
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<td>MCMGA Newsletter</td>
<td>year around</td>
<td>write articles</td>
<td>Helen Hollingsworth, 332-7313</td>
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<tr>
<td>MCMGA Web Site</td>
<td>year around</td>
<td>various</td>
<td>Stephen Anderson, 360-1216</td>
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<tr>
<td>MG Program Committee Member</td>
<td>year around</td>
<td>plan MG programs</td>
<td>Sandy Belth, 825-8353</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Susan Lovell, 339-5914</td>
</tr>
<tr>
<td>Middle Way House</td>
<td>seasonal</td>
<td>various</td>
<td>Clara Wilson, 333-7404</td>
</tr>
<tr>
<td>Wylie House</td>
<td>year around</td>
<td>various</td>
<td>Sherry Wise, 855-6224</td>
</tr>
<tr>
<td>Mother Hubbard’s Cupboard</td>
<td>year around</td>
<td>education, resource</td>
<td>Kendra Brewer, <a href="mailto:garden@mhcfoodpantry.org">garden@mhcfoodpantry.org</a></td>
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<tr>
<td>WonderLab Garden</td>
<td>2 times monthly</td>
<td>various</td>
<td>Nancy White, 824-4426</td>
</tr>
<tr>
<td>Hoosier Hills Foodbank</td>
<td>year around</td>
<td>various</td>
<td>Nicole Richardson, 334-8374</td>
</tr>
</tbody>
</table>

*Remember to wear your badge when volunteering and keep a record of your hours.*
Switchgrass Northwind has swept its way to the top as the Perennial Plant Association’s Perennial Plant of the Year for 2014. The Northwind cultivar of *Panicum virgatum* is distinguished by starkly upright habit compared to the original species.

Northwind provides landscape interest from late summer through winter. Blooms appear in late summer, followed by upright seed heads and golden fall foliage. In winter, enjoy the musical swishing sounds as the sturdy foliage sways in the breeze. Northwind is a fast grower, reaching about 5 feet tall by the time it blooms in late summer.

Switchgrass is a warm-season perennial grass native to most of the continental U.S. While it thrives best in full sun and moist, fertile soil, it adapts well to a wide range of growing conditions, except heavy clay. Once established, Switchgrass can be quite drought tolerant, as well as tolerant to periodic flooding. The foliage can be left standing during winter to reduce soil erosion and provide food and cover for wildlife, such as pheasant, quail, turkey and songbirds. Cut the foliage back to about 3-4 inches before the new growth begins in spring.

The Perennial Plant Association selects a different perennial plant each year to promote throughout the nursery and gardening industry. PPA members nominate plants based on several criteria, including low maintenance needs, adaptability to a wide range of climates, pest and disease resistance, wide availability, multiple seasons of interest and ease of propagation. A selection committee then narrows the field to three or four choices from which the members cast their votes.

For more information on the Perennial Plant of the Year program, see [http://www.perennialplant.org](http://www.perennialplant.org).

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**General Meeting, March 25, 6:30 p.m. Extension Office Meeting Room**

*Seed Collecting, Saving, and Starting* presented by Marie Fleming
Garden with garbage! By Rosie Lerner, Purdue

Instead of throwing out that pineapple top, turn it into a houseplant! Carrot tops and avocado pits can also be salvaged from the garbage pail to the ranks of houseplants.

To grow a pineapple, cut off the leafy top, leaving about a one-fourth inch of the fruit attached. Scoop out the pulp and let the top air dry for a few days. Then, press the top into a pot or pan of moistened rooting media, such as vermiculite or perlite. Keep the media moist at all times, and, in about a month or two, roots should begin to form. Then repot the top into potting soil and place in a sunny windowsill.

Carrot plants can also be started from what we usually throw away. Cut off three-fourths to one inch of the top of the root with the green stalks attached. Set in a shallow pan of moistened rooting media, and wait for the new fibrous roots to develop.

Avocado pits are yet another plant to rescue from the garbage pail. Wash the pit to remove the fruit pulp, and then bury the bottom (wider) half of the pit in moistened rooting media. Another method used by many gardeners is to insert four toothpicks at quarterly intervals about halfway up the pit. The toothpicks should only be inserted as deeply as necessary to provide support. Place the pit into a glass of water with the broad end down, resting the toothpicks on the rim of the glass. Roots and eventually a shoot can take up to three months to appear. Repot into potting soil with the top of the pit exposed, and pinch off the tip of the shoot when it reaches about 6 inches in length. Several side branches will form along the remaining stem.

Fruit trees, such as apple, orange and cherry, can be grown from the seeds of ordinary fruit. Keep in mind that the resulting plants will likely be of inferior quality compared to the plant that produced that tasty fruit. If you are seriously interested in quality fruit production, it is best to plant quality nursery stock of known cultivars. However, seedling fruit plants can make fun houseplants or novelty yard plants.

Most tree seeds must be stored in cool, moist conditions for up to three months before they will sprout. Pack the seeds in moist vermiculite, peat moss or sand. Then plant the seeds in good-quality potting soil. Move the plants to a brightly lit area, such as a south-facing window, and water as needed to allow the top inch of soil to dry between waterings. Use a houseplant fertilizer according to label directions. When plants are large enough to survive transplanting outdoors, plant the seedling trees in a sunny, well-drained location. Most fruit trees take many years (up to seven or more) to become mature enough to flower, particularly when grown from seed. Many fruit species need to be cross-pollinated by another cultivar of that fruit, so it is best to grow a few of each type.
Cooperative Extension Service
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Monroe County Master Gardeners Association

Helping others grow!

Visit us on Facebook!

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Master Gardener Calendar

Thursday, February 6, 8:00 a.m.-4:30 p.m., IMA’s Smaller Garden—Bigger Impact, Indianapolis; log on to http://www.imamuseum.org/ for information

Wednesday, February 19, 1:00-4:00 p.m., Tree Information, Fulton County Fairgrounds, 1009 W. Third Street, Rochester, Indiana

Saturday, March 1, 8-3 p.m., 7th Annual Spring Tonic, Orange County Community Center; see page two