



THE GARDEN SPADE



A monthly Gardening Publication of the University of Missouri Extension -- Southeast and East Central Regions

2011 Master Gardener Conference

By Jessica Griffin

For the first time I attended the Master Gardener State Conference held this September. This year it was located in Hannibal, MO, but every year it is held in a different part of Missouri. If you have never attended, it is a lot of fun and learning, besides getting to meet some really great people who happen to share your passion of gardening.

The convention started on Friday with check in and optional advanced training. You had the choice between a "Roses" or "Plant Disorders and Diagnostics" class. I took the Plant Disorders class with Adam Leonberger and learned a lot. My problem is that when I see a disease or insect on a plant, I think that is the cause of any deterioration in the health or damage to the plant. But this class taught you to investigate further, starting with identifying the plant and what it should look like if it is healthy. This class also explained how to look past symptoms to discover the primary cause of the disorder and the difference between biotic and abiotic causes. It was a great class and if you have the chance to take a similar class with Mr. Leonberger, I highly recommend it. My friend and I did not do the



Riverboat Dinner Cruise or the Guided Tour of the Mark Twain Museum. We spent Friday night walking the streets of Downtown Hannibal on our own. We really enjoyed having that first evening to relax and investigate the town.

Now, Saturday was a fun day! We went on the Private Gardens Tour. We viewed the Salt River Master Gardener Demonstration, the Cardiff Hill Overlook, and the Garth Woodside Mansion gardens, in addition to many private gardens, some tended by members of the convention committee. I can say I actually drooled over the greenhouse at one of these private gardens, and I loved the idea of using pvc pipe to raise the height of the vegetable garden fencing and to make gates. Considering that Hannibal did not have much rain this summer (even less than I did!), I thought these gardens were beautifully maintained. This was also one of the best parts of the convention. We got to meet some interesting people on the bus, discussing our favorite gardening magazines and how to apply what we were seeing to our own gardens.

January 2012

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Master Gardener Conference in Hannibal, Mo

By Jessica Griffin

Saturday night was dinner and the keynote speaker Durell Nelson on “My Life Developing the Historic Gardens of Nauvoo.” Mr. Nelson is a dynamic speaker who can hold your attention and make you laugh without any props, powerpoint, or pictures. He was very knowledgeable and has peaked my interest in visiting these gardens. My friend and I are already planning a trip.

Sunday was class day. You had a choice between four classes for every hour between 8:00 a.m. to 10:50 a.m. I took “Organic Farming Practices” by Jane Hays, “Home Orchards” by Patrick Byers, and “Landscaping with Ornamental Trees” by John Graham. I learned some new organic gardening methods from Ms. Hays that I intend to implement. I loved the “Home Orchards” class with Mr. Byers. He was very informative and answered all my questions. Since I have just inherited some fruit trees and have more land to

play with, I learned a lot that I can apply. Mr. Graham was also very knowledgeable about ornamental trees, and I took several notes in that class.

Sunday was also the day of vendors who had a lot of great items for sale, and I left with a beautiful coffee mug, a gardening t-shirt and a “Summer Wine” ninebark (*Physocarpus opulifolius*) I purchased from Mr. Graham. The committee for the conference did a great job of putting together a package that had information from all the classes available, not just the ones you signed up for. Lunch was served and the keynote speaker was Ted Genenbacher on “Creating Autumn Splendor in Your Landscape.”

The 2012 Master Gardener Conference will be held in Sedalia, Mo from September 14 -16. I am already planning on attending, and I hope you are too!

Disease of the Month: Root Rot

By Donna Aufdenberg

During this time of year, we commonly see root rot showing up in houseplants. Houseplants infected with root rot will appear wilted and fail to recover after a watering. It can also cause a plant’s leaves to yellow and drop.

Root rot is caused by various fungi that infest soil. The fungi requires a cool, moist soil in order to survive. It infects plants through the feeder roots and then spreads throughout the root system causing it to no longer be able to take up water and nutrients. Conditions which promote the fungi include overwatering, poor drainage, inadequate light and crowding of plants. Houseplants often affected include pothos, African violets, begonias, and dieffenbachia.

Prevention is the best line of defense against root rot. Overwatering is the most common cause of



root rot. Other attributing factors include reusing soils, using poor quality potting soil, and improper drainage. Always start with a clean pot (disinfect pots with 10% bleach solution), use a porous potting mix, and make sure the pot has adequate drainage holes. If the potted plant has a saucer, make sure that it never stands in water more than 30 minutes.

In most cases, by the time symptoms appear, it is often too late to save the plant. If you are seeing symptoms, remove the plant from the pot and examine the roots. If root rot exists, the roots will be dark brown to black. If there are some white or cream colored roots left, you can try repotting the plant in a disinfected pot and new potting mix. If the roots are dark brown to black, then the plant should be discarded.

January Gardening Calendar

By Donna Aufdenberg

Vegetable Garden

- Review your vegetable garden plans from last year. What worked? What didn't work? What will you do the same? Is there anything you can do different to improve your garden?
- Take inventory of last year's seed and make a list of what is needed for the spring garden.
- Browse through garden catalogs and order seeds and plants early for best selection.
- Sketch your garden plans on paper, including what to grow, spacing, arrangement, and number of plants needed.



Outdoor Flowering Plants and Ornamentals

- Check young trees for rodent injury on lower trunks. Prevent injury with hardware cloth or protective collars.
- Cut branches of forsythia, pussy willow, crabapple, quince, honeysuckle and other early spring-flowering plants to force into bloom indoors. Place the cut end of the branches in warm water and set them in a cool location.
- Work on your landscape! Make an inventory of the plants in your home landscape. Note their location and past performance. Plan changes on paper first.
- "Leaf" through nursery catalogs and make plans for landscape and home orchard additions. Order plants early for best selection.
- Sow pansy seeds indoors now.

Indoor Flowering Plants and Miscellaneous

- Keep holiday poinsettias and other plants near a bright window. Water as top of soil becomes dry.
- Check produce and tender bulbs kept in storage, and discard any that show sign of decay, such as mold or softening. Shriveling indicates insufficient relative humidity.
- Wash the dust off of house plant leaves on a regular basis. This allows leaves to gather light more efficiently and will result in better growth.
- Allow tap water to warm to room temperature before using on houseplants.
- Insecticidal soap sprays can be safely applied to most houseplants for the control of many insect pests.
- Quarantine new gift plants to be sure they do not harbor any insect pests.
- It is time to start thinking FRUIT TREE MAINTENANCE. Plan to prune your trees and apply dormant oil in the next couple of months.

What Do You Keep in a Garden Journal?

Garden Catalog
Reference
Information

Layout and Design
of Your Gardens

Soil Analysis Record

Soil Building and
Fertilizing Record

Garden and Plant
Wish List

Seed Starting
Record

Transplant and
Direct Seeding
Record

Plant Profiles

Pest and Disease
Problems

What's Blooming

Garden Chore List

Monthly "To Do"
List

Notes From Each
Gardening Month

Do's and Don'ts
Record



Plant of Merit — *Blackhaw Viburnum*

by Sarah Denkler

For some the Blackhaw Viburnum, *Viburnum prunifolium*, is grown as a small tree while others may use it in a border as a large deciduous shrub. This viburnum grows 15 feet tall by 12 feet wide in zones 3 to 9. It blooms a profusion of white in May and June followed by clusters of red drupes in late summer. This fruit becomes dark blue to black in fall, adding contrasting accent to the showy red foliage. The Missouri native is usually pruned as a small, multi-trunked tree. It tolerates clay soil, drought, air pollution and soil near black walnuts but is found growing in moist woods or near streams in the wild. The plant is a good source of food for birds and wildlife as well as humans.

- courtesy of Missouri Botanical Gardens.

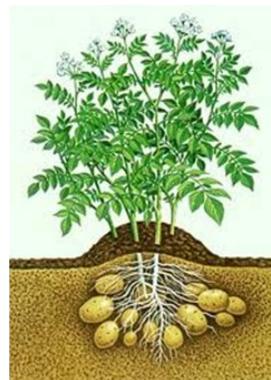
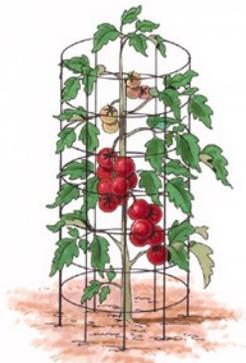


Plant Families: Solanaceae

By Katie Kammler

Why do plant families matter??? All that stuff that you learned back in high school that you forgot as soon as the test was over? It is important to know some plant families because the same pest problems will occur on different plants in the same family.

Solanaceae are a family of flowering plants that include a number of important agriculture crops as well as many toxic plants. The family is informally known as the nightshade family. There are many plants in this family that we are familiar with including tomatoes, potatoes, eggplants and peppers. Other plants include Jimson weed, mandrake, deadly nightshade, angel's trumpet, tomatillo, tobacco, and petunias.



The importance of crop rotation is always stressed when planting vegetable gardens. The Solanaceae family is a big part of that. When planning vegetable crop rotation, remember that tomatoes, potatoes, eggplants and pepper are closely related and will have the same insect and disease problems. It makes the rotation harder to plan when you consider that these four crops are going

to need to go in different places every year. Another thing to consider is that many common weeds are in the nightshade family and can harbor pests that will feed on your vegetable crops because they are in the same family. The weed side of this family is also important to know because many of them are highly toxic to livestock and

humans.

Recycling Christmas Trees

By Katie Kammler

The holidays are over and it is time to put away all the Christmas decorations. This means you need to figure out what to do with your cut Christmas tree. The neat thing about real trees is they have many uses after the holidays. Many communities offer collection sites or local organizations will offer pick up services.

One way to reuse a Christmas tree is to use a chipping machine to chip it up for landscape mulch. Mulch can be used in gardens to help reduce weed problems, modify soil temperatures and help retain moisture. The chipped material can also be used in moderate amounts in compost. Many municipalities recycle Christmas trees this way.

If you like to fish, Christmas trees sunk in ponds make great fish habitat. The trees attract fish of all sizes for a number of reasons. Small fish eat aquatic insects that feed off the branches. They also use the branches to protect them from the larger fish that eat them. Fishing is improved in these areas because they are a popular fish hang out. You can sink trees by

attaching a concrete block to the stump end of the tree with nylon rope. If you have a boat, you can put it anywhere you want or you can wait and put the tree out on ice and it will sink when the ice melts.

Another way to recycle your trees for wildlife is constructing brush piles. Brush piles provide cover for small mammals, birds, amphibians and reptiles.

The animals use the brush piles as shelter from predators, safe resting areas or as a place to nest and raise young. This is easy to do if you live in a rural area along field borders of old overgrown fields.

Some tree disposal tips include making sure to remove all the decorations. Trimmings that are left on the tree can contaminate mulch, pollute water, harm wildlife and cause litter problems. Also do not burn your Christmas tree in a fireplace or wood stove while it is green. The resins in the green tree can lead to the buildup of creosote in the chimney and cause a flue fire.



Master Gardener Hours Are Due!

By Donna Aufdenberg

It is time to turn in your **Master Gardener Volunteer Hours!** If you have already completed your volunteer hours for the year, please send them to your local Master Gardener Coordinator. Addresses for coordinators are located on the last page of this newsletter.

You can also report directly to the Master Gardener program assistant. <http://report.missourimastergardener.com/>

We are also updating the Master Gardener Directory. If you have not turned in Master Gardener Hours for 3 years, you will be moved to the inactive list. If you have not turned in hours in previous years however, you still want to be involved, please let us know!

If you have problems reporting hours, let one of us know...we are here to help!

Internet Resources for Gardeners

by Sarah Denkler

In addition to the wonderful information that can be found on the Missouri.edu/horticulture site there are many websites devoted to horticulture. So many that it is important to remember to look at your source before believing what you read. One tip for finding research based information is to always include the word 'extension' in any web search related to gardening. Other good sources for garden information include the following:



All America Selections at www.all-americaelections.org = promotes new garden seed varieties by listing and informing site visitors about proven performers.

American Horticulture Society at http://www.ahs.org/horticulture_internet_community/index.htm = provides a list of many links for specific plants and gardening subjects as well as societies devoted to specific plants. Also has great books.

A.M. Leonard at www.amleo.com or **Gardener's Supply Company** at www.gardeners.com or **Garden Hardware Co.** at www.gardenhardware.com or **Lee Valley** at www.leevalley.com/us = a few of the many online sites with quality garden supplies.

Biological Control Information Center at <http://cipm.ncsu.edu/ent/biocontrol/> = self explanatory.

Bookshelf at www.ballbookshelf.com or **Timber Press** at www.timberpress.com = publishers of books related to all things in horticulture.

Corona at www.coronatoolsusa.com and **Felco** at www.felcousa.com = sources for commercial grade garden tools.

Grow Native at www.grownative.org = devoted to all plants native in Missouri.

Herb Research Foundation at www.herbs.org/

herbnews and **Culinary Herb Guide** at www.culinaryherbguide.com = are devoted to growth, harvest, storage and use of herbs.

MBGnet at www.mbgnet.net = designed with the kid in mind. This is a lovely link that kids might enjoy about the earth and plant biology. Get the next generation involved and excited.

Missouri Alternative Center at <http://agebb.missouri.edu/mac/links/topic.asp> = is devoted to alternative commercial agriculture. The list of topics provides links to information on vegetables, fruit, flowers and trees.

Missouri Botanical Garden at www.missouribotanicalgarden.org = scroll to the bottom of the page and click on *horticulturists* under "info for" to find a list of links including plant finder index, pest management pages, gardening by the month, plant collection database, plant of merit lists and factsheets on many garden topics.

Missouriplants.com at www.missouriplants.com = a site that will help you figure out some flower possibilities by color that grow in Missouri.

Missouri State University at www.mtngrov.missouristate.edu/publications = provides information on fruit growth and care in Missouri.

Plants for a Future at <http://www.pfaf.org/user/plantsearch.aspx> = a database search of over 7000 edible plants.

Turfgrass Identification Tool at <http://www.agry.purdue.edu/turf/tool/index.html> = will aid your search to identify turf.

What Tree Is That? at <http://www.arborday.org/trees/whattree/whatTree.cfm?ItemID=E6A> = site has a tree key; devoted to identifying trees.

While this is not a complete list, it will provide you with many hours of reading and exploration, should you choose to use it.



Group News - What's Happening

January 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 Parkland MG, 6:30pm @ Courthouse Annex - 3rd Fl.	3	4	5	6	7
8	9	10	11	12	13	14
15	16 Ste. Genevieve MG Meet- ing, 6:30pm, at the Ste. Genevieve Co. Ext. Center	17	18	19 Cape Girardeau Co. MG, 7 pm, Cape Co. Ext. Center	20	21
22	23 Perry Co. MG meeting, 6:30 pm, Perry Co. Ext. Center	24	25	26	27	28
29	30	31	Contact your local Extension Center if you have questions about any event on the calendar.			

January

- 6 - Parkland MGs 1st Monday at 6:30pm, Farmington Courthouse Annex (3rd Floor)
- 7 - Poplar Bluff MGs 1st Tuesday at 6:30pm, Butler County Ext. Center
- 9 - Delta Area MGs 2nd Thursday at 7:00pm, Medical Arts Building, Sikeston, MO
- 16 - Cape Girardeau County MGs 3rd Thursday at Cape County Ext. Center at 7pm.
- 20 - Ste. Genevieve MGs 3rd Monday, at Ste. Gen. County Ext. Center at 6:30pm.
- 27 - Perry County MGs 4th Monday at the Perry County Ext. Center at 6:30pm.

Upcoming Events

- February - Poplar Bluff Master Gardener Core Training, Poplar Bluff, MO
- March - Bonsai MG Advanced Training, Farmington, MO
- March 3 - Parkland Master Gardener Symposium, Mineral Area College, Parkhills, MO

if you have a horticultural related event for the calendar call 573-686-8064 to add it.

Editor's Corner

The Garden Spade is published monthly by University of Missouri Extension staff for individuals and families living in Southeast and East Central Missouri. This newsletter is provided by your local extension council.

Editors:

Katie Kammler, Plant Science Specialist
255 Market St., Ste. Genevieve, MO 63670
573-883-3548

Sarah Denkler, Horticulture Specialist
222 North Broadway Street, Poplar Bluff, MO 63901
573-686-8064

Donna Aufdenberg, Horticulture Specialist
304 High Street, PO Box 19, Marble Hill, MO 63764
573-238-2420

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We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email News to: kammlerk@missouri.edu,
denklers@missouri.edu, or aufdenbergd@missouri.edu

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