

# Heartland Horticulture

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UNIVERSITY OF MISSOURI  
 Extension  
Master Gardener

## News for Missouri Master Gardeners

### Gardeners may want to hold off early planting to avoid frost damage

*By Mary Kroening, State Master Gardener Coordinator*

Avid gardeners ready to plant their first annuals and summer vegetables should hold off until Mother's Day, May 11th. People hear that April 15th is the average frost-free date in mid-Missouri and they think they can go out and plant anything. But April 15th is only the average frost-free date, April 20th in northern Missouri. Fifty percent of the time we have no frost after this date and fifty percent of the time we have a frost.

Cool season vegetables such as peas, beans, lettuce, spinach and beets can be planted from mid-March to mid-April. Summer vegetables such as tomatoes, peppers, squash and cucumbers are more at risk for that late frost damage.

Gardeners should shoot for Mother's Day as their planting date for summer vegetables. No frost has been recorded in mid-Missouri beyond May 12th. If you plant early, plant only what you do not mind losing to frost.

Sometimes if it is not a real harsh frost, you can get by covering the plants. But if the temperature gets down in the 20s, annual and vegetable plants will not survive.

Many people also purchase their summer annual bedding plants like coleus, geraniums and impatiens in April. But cool nighttime temperatures much below 45 degrees can also damage these plants. If you purchase these, move them into the garage or basement at night during cold nights.

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### SAVE THE DATE:

- ◆ June 12th-13th, Master Gardeners of Greater Kansas City Garden Tour
- ◆ July 11th-12th, Greater Ozarks Butterfly Festival, Springfield, MO
- ◆ September 18th -20th, 2009 State Master Gardener Conference, Jefferson City, MO

## News from Around the State

### St. Louis Master Gardeners Host Meeting

By George Hibbard

The Master Gardeners of St. Louis hosted a luncheon on March 11, 2009 for the volunteer coordinators of the various St. Louis community organizations where Master Gardeners volunteer. The purpose of this meeting was to promote coordination and allow coordinators to share their successes in working with volunteers, their lessons learned and plans for volunteers in the coming months.

This was the first event of its kind in St. Louis, and the attendees enthusiastically participated. Besides Master Gardeners, organizations represented included The Missouri Botanical Garden, MU Extension, Flora Conservancy, Forest Park Forever, St. Louis County Parks, Operation Brightside, The Green Center, Gateway Greening, The Gateway Gardener and Forest ReLeaf.

The event was held at the Piper Palm House in Tower Grove Park. The Palm House was built by Henry Shaw in 1878, and is the oldest standing greenhouse west of the Mississippi. It was renovated and rededicated in 1998, and was a terrific venue for such an event. The St. Louis Master Gardeners hope to make this coordination luncheon an annual event.

### Tenth Anniversary for Franklin County Master Gardeners

By Colleen Simons, Franklin County Master Gardeners Chairperson

The Franklin County Master Gardeners are ten years old. The first class was in the fall of 1999 and was held at Shaw Nature Reserve. There have been four classes for new members since then.



We have 30-40 active members that meet monthly throughout the year. A steering committee is selected each year and officers are elected from this group. We are guided by Matt Herring, University of Missouri Agronomy/Natural Resources Specialist.

During the winter months we have member or outside speakers that enlighten us on a variety of topics.

Warm weather finds us outdoors touring garden centers, members' gardens, or other horticulture centers.

### New Web Site Coming On-line

The new web site for online reporting of hours is now available at <http://report.missouriastergardener.com/>

Check it out!!!!

**THE  
NAKED  
earth is  
warm with  
Spring,  
and with  
green  
grass and  
bursting  
trees  
leans to  
the sun's  
gaze  
glorying,  
and  
quivers in  
the sunny  
breeze;**

*– from "Into Battle" by  
Julian Grenfell (1873 –  
1953)*

One of our more ambitious tours was hosted by the Butler County Master Gardeners at Poplar Bluff where we learned about rice production in Southeast Missouri. A horticultural tour of the St. Louis Zoo was another highlight event.



Annual events include a December holiday party, a summer picnic and/or ice cream social at the home of a member, and a spring plant exchange. We also have several members each year who attend the State Conference and report back to our group.

We have had workshops on fruit tree pruning, square foot gardening, bee keeping, and container gardening. We recently toured the composting facility at Longview Research Farm near Gray Summit.

Service projects have included cleaning up the grounds of an old historic church and cemetery, maintaining flowerbeds at the local senior center, plantings for Habitat for Humanity and Exceptional Equestrians, and providing programs for garden clubs, church and civic groups, and local nurseries.



We also are helping with a childcare provider class and provide horticulture judges for local fairs.

Plans for 2009 include programs on birding, herbs, irrigation systems, dried flowers, and outdoor living. During the summer months we plan to tour a rose garden, a lavender farm, Daniel Boone Home, and gardens of several members.

Happy Gardening from all of us in Franklin County!

## 2009 MG State Conference Sept 18-20

Master Gardeners from all over the state of Missouri are welcome to attend this year's state conference:

### "Growing in the Heart of Missouri."

Our conference this year features Advanced Training, wonderful tours of interest to Master Gardeners, a Saturday night banquet, Sunday morning educational sessions and a Sunday luncheon.

We're very excited about our line-up and hope to see you in Jeff City!

For more information check out the web site (still under construction) at

<http://conference.missourimastergardener.com/>



## Upcoming Events

### Nathanael Greene/Close Memorial Park Events in July

Information provided by George Deatz

Come and see our Fourth Annual "Bluegrass & Blossoms" Concert in July. This has been a very successful and well-received event in years past. Come join with the Friends of the Garden, the Springfield-Greene County Parks Department and enjoy the music, gardens, and a wonderful day in the park. The Concert will utilize the area near Drummond Lake in Close Memorial Park from 2-5 p.m. Two musical groups, "Reel Greene" traditional Irish & American music and "Missouri Mountain Gang", traditional bluegrass music, will perform. Traditionally, attendees are asked to bring their own lawn chairs. Water and soda will be available. Plan a picnic in the park if you like and stay a while. Mark your calendar and of course bring your family and friends. The concert is free but donations will be gladly accepted. Last year's concert raised over a thousand dollars in donations.

The first Greater Ozarks Butterfly Festival will be held on July 11-12 at the newly constructed Butterfly House at the garden. Constructed out of mesh, covering a 24 x 36 foot frame, it will house the butterflies and the host plants that allow the butterflies to undergo their complete life cycle so the public can observe the process.

### Master Gardeners of Greater Kansas City Garden Tour

By Sherry Adams, Master Gardener

Mark your calendars for the 2009 Garden Tour in Kansas City! This year the tour theme is "At Home in the Garden" and features the gardens of five dedicated Master Gardeners. Also included is a plant sale at one of the garden tour stops!

The tour will be on June 12th and 13th from 9am to 4pm (that's a Friday and Saturday). Tickets are \$10 each and are available at Kansas City area nurseries (Family Tree Nurseries, Heartland Nursery, Keller's Flower Haus, and Soil Service) as well as through the Missouri Extension offices. For more information call (816) 252-5051 or visit us online at <http://www.muextension.missouri.edu.gkcmg/>



### Close Memorial Park Botanical Center Facts

By George Deatz

The Center will be a 12,800-square-foot building set into a hillside in the 55-acre Close Memorial Park, which adjoins the 59-acre Nathanael Greene Park. The two parks, often referred to jointly as "Nathanael Greene/Close Memorial Park," share a common entrance at 2400 South Scenic in Springfield.

The Center will contain classroom, meeting, and exhibit space, an elevated plaza entrance and roof garden, a library, a combination gift shop and bookstore, and offices for the Springfield-Greene County Park Board; University of Missouri Extension; the extension Master Gardeners; and Friends of the Garden.



## What will a freeze do to my landscape plants?

*Submitted by Jim Jarman for Chris Nigelski*

When sub-freezing temperatures are predicted following a warm period in spring, homeowners are often concerned that ornamental plants in their landscapes may be damaged. While it is rare that we make it to the frost-free date in April without some freezing injury, the damage is generally minor and has no long-term plant health consequences. Although, this was not the case in 2007 around Easter.

Temperate zone woody plants survive freezing by entering a state of dormancy in late fall. Cold hardy, dormant plants have the ability to survive extremely low winter temperatures. A dormant plant will not grow new shoots even when exposed to an extended period of warm temperature.

However, dormancy is gradually overcome as plants accumulate hours of chilling temperatures and, by March, woody plants will often respond to warm temperatures by opening their vegetative and flower buds quickly. In general, the farther advanced the buds, the more sensitive they are to freezing temperatures.

Here is a web site from Michigan State and Washington State Universities describes the relative sensitivity of buds on various fruit trees to cold based on state of bud development. [http://www.hrt.msu.edu/faculty/langg/Fruit\\_Bud\\_Hardiness.html](http://www.hrt.msu.edu/faculty/langg/Fruit_Bud_Hardiness.html)

Many ornamental trees and shrubs will exhibit flower bud damage at temperatures similar to buds on fruit trees and sensitivity will increase as buds advance. For example, blooms on a crabapple tree may be able to survive down to 18 degrees F in the earliest stages of bud development. However, 90% of the flower buds may be lost if the temperature gets down to 25 when they are in full bloom.

Flower buds of many woody ornamentals like lilac can tolerate temperatures as low as 25 if the buds are just starting to expand, especially if the cold period is fairly short. In extreme cases, such as the Easter freeze of 2007, freezing can cause extensive damage to shoots and bark. In most years, however, freezing damage is slight. The main problem may be a disappointing flower display.

Measures taken by homeowners to attempt to protect landscape plants from freezing injury are often futile and sometimes harmful. Covering a large tree or shrub with a tarp may save flower buds if the temperature stays above about 25. Draping the tarp to the ground to trap ground heat and placing a heat source, such as a shop light under the cover, may increase the likelihood of flower bud survival.

However, simply wrapping the top of a tree may do little or no good. Floating row cover (spun-bonded polypropylene fabric) placed over low growing plants may provide 2 or 3 degrees of protection. Using plastic sheeting may cause damage if the covering is left on during sunny conditions following a frosty night.

Generally, irrigation is not advisable as a method of frost protection in home landscapes. This method may be effective in orchards when irrigation applies about 0.1 inch per hour of precipitation and the temperature does not get below about 28 degrees F. Over-irrigation can cause water logging and damage from ice accumulation while providing little or no freeze protection.

Occasional freezing injury to flowers on trees and shrubs is something that we Missourians must learn to accept as a consequence of our unpredictable spring temperatures. Just think how much more we appreciate our magnolias and peaches when they come through un-frosted than do folks in parts of the country not subject to our wild spring temperature swings.

We may have escaped a “hard freeze” recently but there is still time for cold damaging weather.