



THE GARDEN SPADE



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

Water Wisely

By Katie Kammler

Last year at this time we were wishing the record rainfall would stop. Now this year we are looking at what could be the warmest spring on record and a distinct lack of rainfall. The warm temperatures and low humidity worsen the drought like conditions.

May is usually our wettest month, yet much of southeast Missouri has seen less than half an inch of rain for the month and the current forecasts are not looking good for chances of precipitation.

“Moisture is being sucked out of the ground faster than it would be in a typical May, so things dry out faster and you slide quicker into drought,” according to Pat Guinan, MU Climatologist. “High evapo-transpiration, windy and cloudless days with lots of solar radiation, low humidity, and higher temperatures increase the amount of moisture loss from the soil profile as well as from vegetation that transpires that moisture. It’s more typical to see this in the summertime than in the first half of May.”

Dry weather sends many people out with their hoses to water their yards, gardens, and flowerbeds. I want to share some tips and tricks that will make watering less expensive and more effective. Watering wisely saves

money and helps grow a healthier garden with less effort. Watering too much or too little leads to stressed plants that are more vulnerable to pests and diseases.

Water deeply and infrequently. Shallow watering encourages shallow roots. Deep watering causes the plant roots to grow deeper seeking moisture and allows them to be less vulnerable to drought and heat stress.



Avoid runoff. If the water is running off or pooling on the surface, you are applying water faster than the soil can

accept it, therefore it is not doing anything for your plants.

Adjust sprinkler position. Water only targeted areas. Applying water to pavement does not accomplish anything.

Use a timer. Water can be turned off after a set amount of time and run at certain times of the day.

Water plants in the morning or evening. This timing reduces water loss to evaporation and wind.

Overwatering drowns plants. Plant roots cannot get oxygen in a

June 2012

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Water Wisely

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water logged soil. Overwatering also causes disease problems. Use a rain gauge to measure the amount of water the sprinklers are putting out. Turn off sprinklers if it has been raining (like this spring!) Most lawns and gardens need 1 to 2 inches of water per week.

Know your soil. Have your soil tested—the type of soil you have will determine how fast water is absorbed, how much and how often your plants will need to be watered. Soil can also be improved by adding organic matter which increases water

holding capacity.

Group plants by their water needs. Some plants just need watering when they are getting established and others will require routine watering.

Plant natives. Native plants are adapted to local growing conditions, including poor soils and hot dry summers. They will not need to be watered once they are established.

Mulch holds in moisture. Pick your favorite mulch and enjoy the added benefit of fewer weeds plus the moisture holding capacity.

Protect Against Sunscald on Fruit

by Sarah Denkler

One of the many frustrating things about producing fruit or vegetables is having perfect growth and then getting a disorder that ruins the look of the harvest. Sunscald is such a disorder.

Sunscald occurs on the south side of the plant and usually on one side of the produce. It affects many fruits and vegetables including apples, cucumbers, grapes, pepper, raspberry, squash, tomato and watermelon. In each case the symptoms are a bit different and create varied overall results on the harvest.

Tree fruit affected by sunscald will show brown or gold skin that usually has a corky area below the surface. The fruit is still edible and pathogens usually don't attack. On vegetables and most small fruit the area becomes bleached or tan and is often sunken into the vegetable. The area becomes susceptible to pathogens and will quickly rot and decompose. Raspberry are an exception as each individual drupelet becomes white and hard.

Exposure to sun and especially to long intervals of heat have the greatest affect on tissue. When the temperatures remain above 85° for as little as three days and the plant canopy is weak coupled with a lack of cloud cover, sunscald may be an issue.



Above Left: Sunscald on grape results from an extreme heat spike. - Courtesy of Eric Stafne, Mississippi State University



Above: Sunscald on apple. This apple is still edible off the tree. - Courtesy of Washington State University

Left: Sunscald on raspberry. - Courtesy of Cornell University

Temperature is a force that can not be changed but the amount of shade on the produce can.

A healthy plant that has a mass of leaf cover has fewer issues associated with sunscald damage. Good nutrient management and ample water supply as the plant matures will create a good canopy that can protect developing fruit and vegetables. If leaf cover is not present then shade cloth is a possible solution to combat sunscald.

June Gardening Calendar

By Donna Aufdenberg

Ornamentals

- When choosing bedding plants, look for plants that are well-proportioned with sturdy stems. Leaves should have a rich, green color. Check for pests if the foliage appears mottled or the edges of the leaves are curled.
- When early spring flowers are spent, replace them with summer annuals such as nicotiana, portulaca, zinnia or celosia which can handle hot summer heat well.
- Watch for small bagworms feeding on many garden plants, especially juniper and arborvitae.
- Apply mulches as the soil warms. Mulch helps to conserve moisture, discourage weeds and enrich the soil through decaying organic matter.
- Prune spring flowering shrubs after blooms have faded.
- Apply a balanced rose fertilizer to roses after the first show of blooms is past.



Vegetables

- Early detection is essential for good control of vegetable plant pests. Scout gardens at least once every day if possible.
- Consider planting pumpkins this month for Jack-o-lanterns for Halloween.
- To avoid disease problems in the vegetable garden, avoid overhead sprinkler systems and attempt to water in the mornings or earlier in the day to allow foliage to dry before nightfall. Soaker hoses work the best for disease management and water efficiency.
- To maximize top growth on asparagus, apply 2 pounds of 12-12-12 fertilizer per 100 sq. feet. Water well and renew mulches to conserve moisture.

Fruits

- Thinning overloaded fruit trees will result in larger and healthier fruits at harvest time. Thinned fruits should be a hands-width apart.
- Renovate strawberries after harvest. Mow the rows; thin out excess plants; remove weeds; fertilize and apply a mulch for weed control.
- Spray trunks of peach trees and other stone fruits for peach tree borers.
- If you are going to do any summer pruning, make sure to disinfect pruners between cuts to keep from spreading disease from one plant to another.

Lawns

- Keep turf mowed.
- Water newly planted grass regularly to keep it going until cooler weather arrives in the fall.
- Zoysia can be fertilized now while actively growing. Do not exceed 2-3 pounds of actual nitrogen fertilizer per 1000 square feet per year.

Start Planning for the Fall Garden

Purchase cool season vegetable seeds right now!

Start broccoli, cabbage, and cauliflower seed by late June indoors for transplanting in mid-August.

Start lettuce/greens indoors by early August for transplanting in late August. Greens will not germinate in warm soil.

Consider planting a short day variety (55-65 days until harvest) of corn for a late corn harvest. Plant early August.

Plant pansy seeds and snapdragons in mid July to transplant for fall loom.

Most vegetables like zucchini, cucumbers, beans, turnips, radishes and peas can be



Roses

by Sarah Denkler

For some gardeners roses are not a forte but for others growing roses comes naturally. Either way, roses can be a pleasure. Follow some of the following advice to see if it will pay off.

By now most roses have had their first bloom and are well into their second flush of blossom. If your plants do not look like they are producing further blooms then pruning or deadheading is in order. Prune below the spent flower just above a leaf that contains 5 leaflets. This will allow the plant to spend energy on future blooms.

Roses are affected by several insects and many diseases. Some pests include aphids, scale, beetles, rose weevil, spider mites and thrips. Insect management can be done chemically with an insecticide for roses (usually a carbaryl or permethrin).

Insect management can also be done organically by attracting or releasing beneficial insects and by learning what beneficial insects look like so that they are not killed by accident. Continued monitoring for insects will tell you when to use strong streams of water to knock insects off rose plants. This can be done to give beneficial insects time to move in and control a pest population instead of using chemicals. One organic chemical that is designed to kill chewing insects is Spinosad. It is sprayed on the plant and then must be eaten by the insect.

Common diseases of roses include black spot (circular black spots of the upper leaf tissue), powdery mildew (whitish/gray powder on the leaf), rust (red/ brown spots on the underside of the leaf) and botrytis blight (flowers remain closed and form gray spores). Look for these ingredients on the label when controlling diseases in roses: captan, copper and mancozeb. For powdery mildew use sulfur.

Organic control of disease includes pruning after a



chance of frost injury in spring, removing and burning diseased canes and leaves, keeping debris clear of the ground, keeping the plants open for good air movement and maintaining a healthy soil.

Roses are related to apples and pear. Therefore they are susceptible to fireblight just as fruit trees are. The cool temperatures in early spring combined with moisture have caused an increase in fireblight issues in roses this year. The tip of the stem will turn brown and the stem will form cankers. These cankers can be

removed in late fall but be sure to sanitize pruners after each cut and cut far below the canker, removing the entire stem if possible. Burn all the tissue that is removed.

Virus's can also attack roses, discoloring the leaf tissue in irregular white or cream patterns. Remove and destroy any roses that have virus or live with their appearance. As of now, no insect spreads a virus from one plant to another however infected tissue will spread through grafts.

In late winter prune out the disease or dead tissue from plants. (If size matters then trim roses to 12 inches from the ground.) They will quickly generate new growth. As you prune look for any suckers that may be coming up below the graft. These need to be pruned off the plant. Suckers will take much of the energy from the root system and quickly eliminate the desired cultivar from the garden.

Some of the common roses that are grown include floribunda (meaning it has many flowers on a stem), grandiflora (meaning there is one large flower on a stem), miniature (meaning there are many small flowers and small leaves on the plant), hybrid tea (meaning the plant will have several larger roses on each stem) and climbers (long, almost vining stems with many roses).

For more information about roses and variety selection check out these links: [www. Rose.org](http://www.Rose.org), www. Ars.org, www.rosemagazine.com and www.rosemania.com

Local Plant Favorites

By Donna Aufdenberg

During the next several months, we will be featuring plants that are favorites to local gardeners. One common response that I received was that it was hard to pick a favorite since it can vary according to the season. Here are some of the favorites that gardeners sent to me!

Our first selection was **Walkers' Low Catmint**. This plant was selected by three gardeners. Jessica Griffin from Fredericktown states, "It blooms throughout the growing

season, is a tough, beautiful plant that provides me with a lot of color that does not have to be babied!" Debra Henk from Ironton offers this about the plant, "It makes a huge



Walkers Low Catmint, picture from Mo Botanical Garden

mound of blue green foliage with pretty purple spikes of flowers early in the spring. If you cut it back after the first big flush of bloom, it reblooms with scattered flowers pretty much all summer. It gets pretty big, but is not invasive, doesn't need pampering and can be easily divided to share." Sue Binnie from Marble Hill adds, "It grows to about 30 - 36" high and wide. Once established, it is very drought resistant and humidity doesn't bother it either. It needs full to partial sun."



The second selection is **Caladiums**. Ken Shields from Sikeston says, "The foliage and many different colors that they come in is great for my yard...I have a lot of shade, and these are great in pots and window boxes. "

Bob Etherton, from Cape Girardeau offered this about his favorite, "I enjoy most aspects of

gardening, lawn, fruit and vegetable gardening. But my favorite is

vegetables. My favorite plant is **Contender Green** beans. They are easy to grow and produce most of the summer. I usually plant a second planting around August



15th and often have better results with the fall planting...we enjoy the beans, also enjoy sharing them with friends and freezing for use all year."

Ruth Illers from Jackson states, "My favorite plant is **Brugmansia (Angel Trumpet)**. My three plants are white, yellow and peach colored and they bloom the entire

Summer season. I believe angels would be happy to adopt any of the blooms on my plants since they look exactly like beautiful trumpets. They



Brugmansia (Angel's Trumpet), photo from Iowa State University Extension

indeed bring beauty and joy for the entire season."

As for my *present* favorite plant (it changes weekly), I have had the pleasure of experiencing **Indian**

Pinks this year. Mine finally bloomed! I have had many conversations with gardeners that has led me to believe that this plant is very durable as it is beautiful. The red and yellow combination is very eye catching!



If you didn't see your favorite listed, don't dismay! Look forward to seeing more favorites in upcoming issues of the Garden Spade!

Book Review

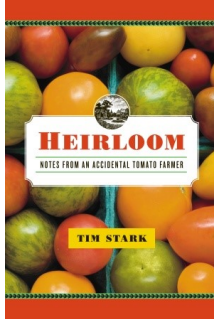
by Megan Franke, Cape Girardeau County Master Gardener

Book: Heirloom: Notes from an Accidental Tomato Farmer by Tim Stark

This is NOT your typical “how-to” book. It will not help you to plant or grow heirloom tomatoes, nor will it give you contacts or sources for seeds.

What you will get is inspiration—inspiration to persevere and do a job well, not just to grow tomatoes, but in doing all things that are important. Stark is a latent writer who wrote a series of articles relating to his experiences as a truck farmer. He relates the “highs and lows” of being a truck farmer, which are mostly hard work and obstacles that needed to be overcome.

Stark did not come into farming in the traditional manner of being from generations of farmers. His father was an attorney and Stark started his working career as a NY City management consultant. When he saw his consulting as a “dead end” job, he decided to try his hand at writing. This did not occupy all of his time, so he started planting tomatoes, three thousand tomatoes! He quickly outgrew his NY apartment and moved to the inactive “family farm” in PA. There he recruited the help of family and friends, to produce a “bumper crop” of heirloom tomatoes that he hauled to NY City’s Union Square Greenmarket.



That sounds relatively simple, but actually, those results came after digging the 2 acre garden plot with a spade, transplanting with a trowel, weeding by hand because no chemicals were used, and water from a tank strapped to the back of a pick-up truck. Picking until midnight and up again at 3:30 to head to Manhattan to spend the day selling tomatoes. The work was overwhelming and got out of hand; the farm appeared to be in a state of chaos with scraggly tomato plants covered with weeds and surrounded by insects. Stark actually found that the less farming he did, the greater their yield.

Stark proved to be an enterprising farmer diversifying with numerous varieties of eggplant, peas, fruit, even berries. Today Eckerton Hill Farm does a land-office business in heirloom tomatoes and unknown chile peppers that are served by some of the most challenging chefs in NY City and have also been featured in Gourmet magazine. You will find Stark’s articles well written and enjoyable to read. His respect and admiration for fellow growers and chefs is very apparent.

Stark, T. (2008). Heirloom: Notes from an accidental tomato farmer. New York: Broadway Books.

Welcome! New Master Gardeners

By Donna Aufdenberg

There were 27 gardeners that completed the Spring 2012 Master Gardener Training in Cape County! Congratulations and Welcome!!!





Group News - What's Happening

June 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Contact your local Extension Center if you have questions about any event on the calendar.				1	2 Blueberry School at Highland Blueberry Farm, 9am-3pm Day w/ Natives @ Hamilton Native Outpost; Elk Creek, MO
3	Parkland MG, 6:30pm @ Botkin Lumber Co. in Farmington Industrial Park	5 Missouri Grape Growers Association Annual Field Poplar Bluff MG, 6:00pm @ Mrs. Clodfelter's	6	7 Delta Area MG, 7 pm, Sikeston	8	9
10	11	12	13	14	15	16
17	18 Ste. Genevieve MG Meeting, 6:30pm, at the Ste. Genevieve Co. Ext. Center	19	20	21 Cape Girardeau Co. MG, 7 pm, Cape Co. Ext. Center	22	23
24	25 Perry Co. MG 6:30 pm, Perry Co. Ext. Center	26	27	28	29	30

July

- 2 - Parkland MGs 1st Monday at 6:30pm, Botkin Lumber CO, Frmgntn Industrial Park
- 3 - Poplar Bluff MGs 1st Tuesday at 6:00pm, Butler County Ext. Center
- 7 - Warm Season Grass Pasture Walk; Hamilton Native Outpost, Elk Creek, MO 3-8pm
- 12 - Delta Area MGs 2nd Thursday at 7:00pm, Medical Arts Building, Sikeston, MO
- 16 - Ste. Genevieve MGs 3rd Monday, at Ste. Gen. County Ext. Center at 6:30pm
- 19 - Cape Girardeau County MGs 3rd Thursday at Cape County Ext. Center at 7pm
- 23 - Perry County MGs 4th Monday at the Perry County Ext. Center at 6:30pm

Upcoming Events

September 14 to 16 - State Master Gardener Conference; Sedalia, 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.

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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,
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