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"Home grown tomatoes, home grown tomatoes. What would life be like without home grown tomatoes.

Only two things that money can't buy. That's true love and home grown tomatoes."

- John Denver, *Home Grown Tomatoes*

YOU COULD BE YOUR TREE'S WORST ENEMY...PREVENTING MOWER & WEED EATER DAMAGE TO TREES

Are your trees suffering from lawn mower or weed-eater damage? Each time you mow or use the weed-eater and you hit the trunk of a tree, you are sending the tree into decline. Each year thousands of trees are damaged or killed by careless mowing or trimming. Often this damage occurs to "park" trees. This damage can be avoided when lawn mowing equipment is operated responsibly around trees. If you are a park supervisor, please take some time to discuss lawnmower damage and prevention with your staff.

Trees do not regenerate new tissue like humans when a wound occurs. Most tree injuries occur when mower operators attempt to closely trim grass around trunks with a push or riding mower. Prevent this from happening by removing the grass around the tree, or by hand trimming. Grass and weeds should be removed from around tree trunks and beneath trees if maximum growth is expected. Grass and weeds compete for the same nutrients and water that the tree needs. During the summer when rainfall is low and less than adequate watering occurs, the competition for water imposed by weeds or grass turf can substantially reduce tree growth. When competition from grass is eliminated, tree roots are more evenly distributed, root numbers are higher and they utilize a larger volume of soil. Effective utilization of soil by a larger root system will mean that the fertilizer you have added will be utilized more fully.



Spreading mulch such as leaves, grass clippings or straw under and around trees will effectively control grass and weeds and provide an attractive appearance around the base of the tree. Not only will mulching with organic materials prevent grass competition, it will also conserve moisture for use by the tree roots and stabilize soil temperatures (since roots don't like extremely hot or cold soils). Young trees should be surrounded with at least 3 feet of a thick mulch (3 to 4 inches deep) that is maintained throughout the growing season.

Most people do not understand that injury and infection started by lawnmower wounds can often be the most serious threat to tree health. Tree wounds caused by lawn maintenance equipment are often the cause of internal decay and rot found in older trees that survived initial damage years ago.

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Decay fungi becomes active on the wound surface and structural deterioration of the woody tissues beneath the wound will often occur. Many wounded trees that are not girdled may eventually break off at the stem or root collar due to internal decay.

The problem of lawnmower injury is not a tree problem but a people problem. It is a classic case of communication breakdown. The solution is to educate lawnmower operators about how serious these wounds can become and also to protect trees from careless grass trimmers and lawnmower jockeys who enjoy using tree trunks as crash sites. A mulched area around the tree trunk can provide protection from these types of tree-damaging behavior.

So, if you want your trees to live a long time, don't abuse them with weed-eaters and lawnmowers!

NATIONAL FLOWERING PLANT KNOWLEDGE CONTEST AND TOURS JULY 25 IN LAPLATA

Free flower garden tours will be provided for individuals and groups at the LaPlata Silver Rails Event Center on Saturday, July 25 from 9:00-12:00. The tours will focus on plant identification and history. Over 100 plant species will be available including orchids, fiddleneck (bee plant) carnivorous plants, plants in the lycopersicum family, among many others.

At 2 pm, at the Silver Rails Event Center Park, there will be a flowering plant knowledge contest, open to ages 15-19. For more information about the tours and to register a youth for the contest, call Clyde Burch at 660-332-7777.

A wonderful new book, *Flowers and Herbs of Early America*, published by the Colonial Williamsburg Foundation, has recently been donated to the LaPlata Public Library. Published in 2008, this beautifully illustrated book brings the robust botanical heritage of early America back to life. It pictures and describes the plants grown at Colonial Williamsburg and in Thomas Jefferson's garden at Monticello. Seeds of several of these plant species have been acquired and planted at the Silver Rails Event Center Park. They will be part of the knowledge challenge for students competing in the plant identification contest. Source: Clyde Burch, LaPlata

TOUR OF AMISH VEGETABLE FARMS TO BE HELD JULY 31

There will be a tour of Amish vegetable farms and the wholesale auction in Drakesville, Iowa on Friday, July 31. There is no cost to attend. We will be taking a bus (see below to register) from the Adair County Extension Center to Drakesville, where we will attend the wholesale auction from 10:00-12:00. There you will have the opportunity to see how an auction operates, visit with producers, and purchase produce. Food and drinks are available at the auction. We will have a boxed lunch at 12:00 (see below to register). At 12:30 we will tour the farm of David Allen Yoder of Drakesville. David raises vegetables in high tunnels as well as in the field. We will stop at the Ice House convenience store on the Iowa/Missouri line for a bathroom break and to allow you to get a drink. The second farm on the tour will be the farm of Levi and Barbara Delagrang, north of Greentop. Levi grows vegetables and several acres of pumpkins. The final stop will be to the farm of Willis Schmucker, north of Kirksville. Willis and his family grow many different vegetables and market them through the wholesale auction and a farm stand.

The bus and/or free box lunch will be available to the first 45 people to register by Wednesday, July 29 by calling the Adair County Extension Center at 660-665-9866. We are only providing water with your boxed lunch. You may bring drinks with you or purchase them at our stops. Dress for the weather. Shorts, tennis shoes, hat and sunscreen are recommended. Anyone is welcome to drive to these stops. It will be about 45 miles one way. Get directions at the Adair County Extension Center or on our website at <http://extension.missouri.edu/adair/horticulture/AmishTour.shtml>.

There will be some moderate walking to see the vegetable crops. When planning for this tour, keep in mind that it may be a long, hot day. The auction and the farms are not handicapped accessible. Below is the schedule for the day. Produce may be for sale at some of the farms.

8:45	Load bus at Adair County Extension Center	1:45	Restroom Break at Ice House
9:00	Leave Extension Center	2:15	Levi Delagrang farm
10:00	Southern Iowa Produce Auction	3:15	Willis Schmucker farm
12:00	Lunch (boxed lunch from Hy-Vee-must register)	4:45	Arrive at Adair County Extension Center
12:30	David Allen Yoder farm		

HOME GARDEN SWEET CORN

By: Max Glover, Plant Science Specialist, Shelby County

Sweet corn is a favorite among home vegetable gardeners. Many people plant sweet corn in their gardens on several different dates throughout the spring so they can enjoy fresh corn on the cob for several weeks during the summer.

Soil temperature dictates when it is possible to start planting sweet corn in the spring. Ideally soil temperatures should reach 65 degrees Fahrenheit before planting. However, some sweet corn hybrids offer greater cold tolerance and can be purchased with a fungicide seed treatment, making it possible to plant at soil temperatures around 55 degrees Fahrenheit. Newly purchased seed should be planted about 1 inch deep, 6 inches apart, in rows about 30 to 40 inches apart. To assure good pollination plant at least 4 rows at a time if possible.

Sweet corn hybrids are available in differing maturities, ranging from about 65 to 90 days. In addition to planting one hybrid on several different dates, gardeners often plant multiple hybrids of differing maturities on the same date to spread out harvest dates. Other differences between sweet corn hybrids are plant height, kernel color (white or yellow), kernel texture, and kernel sugar content.

Sweet corn requires soil fertility levels similar to most garden vegetables. It responds well to nitrogen fertilizers, which can be applied prior to planting or poured beside the row when plants are 6 to 18 inches tall. To learn more about fertilizing your garden ask your local MU Extension office for publication G6950, or do a Google search for "Steps in Fertilizing Garden Soil".

The most problematic insect pest of sweet corn is generally corn earworm, which eats the silks and kernels starting at the tip of the ear. Ears with earworm damage on the tip can still be consumed after breaking or cutting off the tip of the cob to remove the worm and any damage it caused. Spraying ear tips with B.T. can be effective at controlling earworms, and applying several drops of mineral oil to ear tips every 3 to 7 days after silks appear can also repel corn earworms.

When silks begin to dry out and turn brown it is about time to harvest sweet corn. Some people prefer larger, tender kernels while others prefer smaller crisp kernels. After silks are mostly brown pick out a thicker ear from a row and peel back the husk to get a peek at the kernels and see if it is ready to pick. Before long you will get a good feel for when ears are just right for you. If someone else at the table disagrees with your harvest timing, invite them to help you pick!

For more information on growing sweet corn in your garden ask your local MU Extension office for publication G6390, or do a Google search for "Growing Sweet Corn in Missouri".



GREENHOUSE MANAGEMENT SHORT COURSE JULY 20-22

This year we are offering Part I of our two-part short course on greenhouse management. Part I deals with the basics of greenhouse design and climate control, basic plant nutrition, growing media, pest management and the production of several greenhouse crops grown in Missouri. Instruction will be handled by University of Missouri personnel and experienced growers. There will be ample opportunity for practical, "hands-on" learning.

Since we want the instruction to be individualized, registration will be limited to the first 25 individuals to respond to this announcement. Reasonably-priced, comfortable housing will be available on the MU campus, very convenient to short course headquarters. Information concerning housing will be sent upon receipt of registration. **Registration deadline is Friday, July 10, 2009.**

For more information and for the schedule and registration form, call or email me-Jennifer.

JULY GARDENING TIPS

Ornamentals

- Continue to pinch mums until mid-July. Pinching after this may delay flowering.
- Deadhead perennials (remove dead flowers) that have finished blooming.
- Prune climbing roses and rambler roses after bloom.
- Spider mites may be a problem during hot, dry weather. Leaves will become speckled above and yellowed below. Evergreen needles appear dull gray-green to yellow or brown.
- Water newly planted trees and shrubs thoroughly at least once a week.
- Fertilize trees and shrubs by July 4. Late fertilizing may cause lush growth that is more prone to winter kill.
- Black Spot may be a problem on roses. Remove and pick up infected leaves and spray fungicides as needed.
- Powdery mildew may be found on lilacs. It is rarely harmful and shrubs grown in full sun are less susceptible.
- Divide irises now.

Vegetables

- Blossom end rot of tomatoes and peppers may become a problem. Maintain soil moisture and do not let soils dry out. Place a layer of mulch 2-3 inches thick around plants.
- Keep weeding! Prevent weeds from going to seed.
- Dig potatoes when the tops die. Plant fall potatoes by July 15th.
- Harvest onion and garlic when the tops turn brown.
- Keep cucumbers well watered. Drought conditions will cause bitter fruit.
- Sow seeds of carrots, beets, turnips, and winter radish for fall harvest the last week of July. Also set out broccoli, cabbage, and cauliflower transplants for the fall garden at this time.

Fruit

- Protect grapes from birds!
- Prune out old fruiting canes of raspberries after harvest is complete.
- Apply second spray to trunks of peach trees for peach borers.
- Early peach varieties ripen now.
- Blackberries will begin to ripen soon.

Turf

- Water lawn frequently enough to prevent wilting. Early morning irrigation allows turf to dry before nightfall and will reduce the chance of disease.
- Monitor lawns for newly hatched white grubs. If damage is occurring, apply appropriate controls, following product label directions.

-Missouri Botanical Garden-

UPCOMING EVENTS

- July 6: Fabius MG club meeting,** 7 pm, road side park east of Memphis.
- July 7: Heartland MG meeting.**
- July 7: Salt River MG meeting;** 7:00 pm, Salt River Master Gardeners' Demonstration Garden, corner of Main and Bird Streets, Hannibal.
- July 13-18: NEMO Fair,** Kirksville.
- July 14: Magic City MG meeting,** meet at 5:45 pm, at commuter parking in Moberly for tour of Shelter Gardens in Columbia.
- July 14: Sullivan County MG meeting,** 6:30 pm, Paul and Sandy Henley home garden, dessert to follow the meeting.
- July 20-22: Greenhouse Management Short Course,** University of Missouri, Columbia.
- July 21: Kirksville Area MG club meeting,** location TBD.
- July 25: Nat'l Flowering Plant Knowledge Contest;** 2 pm, Silver Rails Event Center Park, LaPlata. Open to ages 15-19. For more information and to register a youth, call Clyde Burch at 660-332-7777.
- July 27: Macon-Shelby MG meeting,** 7 pm, Missouri Wildflower Walking Tour, Long Branch Lake, bring your own sack supper.
- August 13-23: MO State Fair,** Sedalia.

September 12: NEMO Food Fest, Kirksville Square, 9:00-12:00.

September 18-20: State Master Gardener Conference, Jefferson City. See this website for more details: <http://conference.missourimastergardener.com/>

UNIVERSITY OF MISSOURI
 Extension

Garden Talk!

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