

Horticulture Tips

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Oklahoma Cooperative Extension Service
Division of Agricultural Sciences and Natural Resources
Oklahoma State University

GARDEN TIPS FOR JULY!

David Hillock

Vegetable Garden

- Make fall vegetable garden plantings in late July. Fact Sheet 6009 gives planting recommendations.

Lawn

- Brown patch disease of cool-season grasses can be a problem. (F-6420)
- Meet water requirements of turfgrasses. (F-6420)
- Fertilization of warm-season grasses can continue if water is present for growth. (F-6420)
- Vegetative establishment of warm-season grasses should be completed by the end of July to ensure the least risk of winter kill. (F-6419)
- Mowing heights for cool-season turfgrasses should be at 3 inches during hot, dry summer months. Gradually raise mowing height of bermudagrass lawns from 1½ to 2 inches.
- Sharpen or replace mower blades as needed. Shredded leaf blades are an invitation to disease and allow more stress on the grass.

Tree and Shrub

- Control bermudagrass around trees and shrubs with Poast, Fusilade or Glyphosate herbicides. Follow directions closely to avoid harming plants.

Fruits

- Continue insect combat and control in the orchard, garden and landscape. (F-7306, F-7313)
- Check pesticide labels for "stop" spraying recommendations prior to harvest.
- Harvest fruit from the orchard early in the morning and refrigerate as soon as possible.

Flowers

- Divide and replant crowded Hybrid Iris (Bearded Iris) after flowering until August.

General Landscape

- Water plants deeply and early in the morning. Most plants need approximately 1 to 2½ inches of water per week.
- Providing birdbaths, shelter and food will help turn your landscape into a backyard wildlife habitat.
- Insect identification is important so you don't get rid of the "Good Guys." (F-7307)
- The hotter and drier it gets, the larger the spider mite populations!
- Expect some leaf fall, a normal reaction to drought. Water young plantings well.
- Have you visited the *Oklahoma Gardening Studio Gardens* in Stillwater for a group tour?

Beetlemania

Eric T. Stafne

July is the time when two significant pests of fruit crops emerge – Japanese beetles and green June beetles. Both can be devastating to many fruit crops, but for different reasons. Japanese beetles are usually present from late June through August. They are mainly foliar feeders, but can also attack flowers and fruit. They lay eggs underground in grassy areas, preferring soil with moisture. The grubs feed on grass and weed roots and overwinter in the areas where they feed. The adult form is about ½ inch long, copper colored with metallic green markings and tufts of white hairs on the abdomen. Not all areas of Oklahoma will experience this pest, mainly urban areas of eastern and north central Oklahoma.

My personal experiences with Japanese beetles have been with blackberries, blueberries, grapes and apples. Most blackberries have already been harvested by the time Japanese beetle populations are at their peak. However, leaves can be severely skeletonized which may affect the photosynthetic capabilities of the plant. A more serious consequence of Japanese beetle infestation in blackberries is feeding on flowers of primocane-fruiting blackberries. These are a new type of blackberry that bears most of its crop in the late summer/fall. The majority of the flowering occurs during July and August, therefore making them prime targets for Japanese beetles. Blueberries are not severely affected in most cases, but Japanese beetles will feed on the fruit, although most of it is harvested before peak populations. Grapes show a great deal of genetic variability when it comes to feeding by Japanese beetles. Grapes with thick, hairy leaves are less likely to be attacked than those with thin, smooth leaves. These latter types are wine grapes for the most part. Grape clusters are not fed upon, but severe defoliation can occur. Japanese beetles are particularly a problem in new vineyards using grow tubes, so frequent monitoring is required to reduce the damage. Apples are very susceptible and need to be monitored closely. Apple trees are a preferred host of the Japanese beetle and can be defoliated quickly in a large infestation.

Control of Japanese beetles in grapes is outlined in the OSU Current Report 6252:

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1493/CR-6252-2006web.pdf>

Control of Japanese beetles on other fruit crops can be found in the Midwest Commercial Small Fruit and Grape Spray Guide 2006: <http://www.hort.purdue.edu/hort/ext/sfg/06SprayGuide.pdf>

Or the Midwest Commercial Tree Fruit Spray Guide 2006:

http://www.hort.purdue.edu/fruitveg/ID168_2006.pdf

Green June beetles are mainly fruit feeders, thus being more economically important than Japanese beetles. Green June beetles are about 1 inch long, brown on the sides and metallic green on top. The life cycle is similar to that of the Japanese beetle with emergence in roughly the same time period. These beetles are common where compost or manure has been spread, because it acts as a prime site for egg deposition by the female beetles. Since green June beetles can fly it is difficult to control them. They are attracted to ripe and overripe fruit. They can be particularly troublesome on grapes and peaches. Control of these insects is similar to that of the Japanese beetle. For more in-depth information about these pests and how to control them, visit the Midwest Small Fruit Pest Management Handbook online at: <http://ohioline.osu.edu/b861/>

And also the Midwest Tree Fruit Management Handbook online at:
<http://www.ca.uky.edu/agc/pubs/id/id93/id93.htm>

The green June beetle is more widespread throughout Oklahoma than the Japanese beetle, but both are troublesome pests to the fruit industry.

Establishing Turfgrasses

David Hillock

Warm-season grasses such as bermuda can be established by seed or vegetative means such as sod, sprigs or plugs. Seeded varieties should be planted by July 1 in order to establish in time for winter. If establishing by sod, sod should be in place about one month before the first frost in order to allow enough time for adequate rooting. Sprigging and plugging should be done at least two months before the first frost in order to allow for adequate spread and rooting.

For areas being converted to cool-season grasses this fall, the area should be sprayed late July/early August with a product containing glyphosate to kill bermudagrass and other tough perennial weeds.

Cool-season turfgrasses germinate optimally when daily mean temperatures of the upper soil surface range from 68° to 86°F. Thus, the ideal time to seed Kentucky bluegrass, perennial ryegrass or tall fescue is in late September and October. Fall plantings of cool-season turfgrasses are superior over spring plantings because there is more time for plant development prior to heat and drought conditions of summer.

Stay Cool This Summer – It May Save Your Life!

David Hillock

As the projected temperatures continue to reach into the high 90's and low 100's, it is a good time to implement your high temperature plan/procedures. Below is a comprehensive description of those at risk and steps to take to minimize the impact of summer time heat.

Possible heat related injuries, take caution.

The following information is compiled from Centers for Disease Control and Prevention and other sources and is a reminder to everyone who has to be outside in the heat.

- Who is most at risk for heat stress?* Most victims of heat stress are the elderly. Heat stress is the burden that hot weather places on your body, especially your heart. If the burden is too great, heat can cause you to be very sick or even kill you.
- What are some facts about the heat?* Temperatures above 90 degrees can be very dangerous, especially when the humidity is high. Crowded living conditions increase this danger. Your

body needs time to adjust to hot weather: A sudden increase in temperature, especially in the early summer, is particularly dangerous because your body is unprepared for the strain.

It doesn't take a heat wave to kill you. If you are feeling hot and uncomfortable, take steps to avoid heat stress. Heat stress can cause many medical problems including heat exhaustion, heat stroke, heart failure and stroke. Proper precautions can make you more comfortable, prevent illness and even save your life.

- ❑ *What are some of the warning signs relating to heat stress?* There are various health-related medical conditions that can increase a persons chances of getting sick in hot weather:
 - A weak or damaged heart
 - Hypertension
 - Problems with circulation
 - Diabetes
 - A previous stroke
 - Being overweight
 - Infection or fever
 - Diarrhea
 - Drinking alcoholic beverages
 - Skin diseases or sunburn that may reduce sweating

Many medications can make you much more vulnerable to the heat. If you take medicine for high blood pressure, nervousness, depression, poor circulation or sleeplessness, you should check with your doctor or pharmacist for advice.

- ❑ *What are some of the "early warning signs" of heat stress?* Hot weather makes most people feel uncomfortable and can cause a lack of energy or slight loss of appetite. These are mild signs heat stress, and unless they last a prolonged time, there is no need to be alarmed. It is important to pay attention to the early warning signs of heat illness. Heat stress can be fatal, and the serious signs mean that you are losing the battle.
- ❑ *What are the serious signs of heat stress?*
 - Dizziness
 - Rapid heartbeat
 - Diarrhea
 - Nausea
 - Throbbing headache
 - Dry skin (no sweating)
 - Chest pain
 - Significant weakness
 - Mental changes
 - Breathing problems
 - Vomiting
 - Cramps

- ❑ *What can be done to avoid a heat stroke? KEEP COOL.* Spend as much time as you can in cooler surroundings, such as a cooler room in your home, an air-conditioned shopping mall, senior center, public library or movie theatre.

AIR CONDITIONING - Air Conditioning can provide lifesaving relief from heat stress, especially if you have a medical condition like heart disease.

COOLING WITH FANS - Fans can draw cool air into your home at night or help provide good indoor air-circulation during the day. Air movement reduces heat stress by helping to remove extra body heat (When it is extremely hot, a fan may cause you to gain body heat by blowing very hot air over your body.)

BATHS AND SHOWERS - Cool baths or showers (with water temperature around 75°F) provide amazing relief from heat. Cool water removes extra body heat 25 times faster than cool air.

CLOTHING - Wear comfortable, lightweight clothing when you are at home. Lightweight, light colored, loose fitting clothing is more comfortable in hot weather. Cotton is very comfortable. Wear a hat or use a parasol or umbrella to protect your head and neck when you are outdoors.

DRINK OFTEN - Drink often and in reasonable amounts. Don't try to drink a lot of coffee or tea. They are fine in moderation, but water is your best bet. In hot weather, your body needs more water. Don't wait until you are thirsty, because your body needs more fluid than thirst will indicate. By the time you feel thirsty, you may already be dangerously low on water. If you have a disease, a medical condition or problem with body water balance, check with your doctor for advice on how much water you should drink in hot weather.

SLOW DOWN - Take it easy, especially at the start of hot weather when your body is less prepared for the heat. Physical activity produces body heat.

WATCH WHAT YOU EAT - Avoid hot foods and heavy meals. They add heat to your body. Try using your cooking range less. Cook your meals during the cooler part of the day, before 10 a.m. or after 7 p.m.

WATCH YOUR SALT INTAKE - Check with your doctor before you increase the amount of salt or potassium in your diet. Do not take salt tablets without your doctor's permission.

AVOID ALCOHOL - Alcohol interferes with your body's fight against heat stress. It can put a strain on your heart.

Injury Prevention Tips for Gardening

David Hillock

Gardening, a common summer time activity, can cause repetitive injuries if not done correctly. It is important to take precautions to avoid injuries. Gardening is made up of many repetitive activities such as weeding, digging, raking, lifting, gripping, stooping, squatting, etc. The nature of these activities places the avid gardener at higher risk for injury than those with a more

stationary hobby. For those who work full time and garden in their off time, the risk of injury is even greater since the body doesn't have time to recover between activities.

The repetitive nature of gardening places stress on the hands, wrists, elbows, neck, back, hips, knees and ankles. Poor posture and awkward positions only increase the stress to the body. Using proper ergonomics, good posture and performing warm up exercises prior to gardening can help prevent injuries.

There are numerous ergonomic tools for gardening available at home and garden stores and online. These tools are designed to place less stress on the body during use, thus, helping to prevent injuries. For the do-it-yourselfer, tool handles can be built up using padded tape called "Wrap N Grip" or foam pipe insulation. Another alternative is to wear padded gloves like those used by bikers or weightlifters. Any of these options will increase traction for gripping, decrease the amount of muscle force needed to grip, and decrease the stress and strain on the joints. Tools ideal for padding include rakes, shovels, trowels, pruning shears and spray nozzles.

Periodic maintenance of tools can lessen the chance of injury. Shovels, hoes, trowels and pruning shears require less muscle force to use if kept sharp. Tools with moving parts should be lubricated.

Simple modifications to help prevent injuries include:

- Stretch before and after gardening
- Change position frequently
- Keep work as close to your body as possible
- Avoid reaching
- Use light weight equipment
- Use step stools or ladders to avoid reaching overhead
- Use two hands when possible
- Avoid twisting the forearm
- Keep elbows slightly bent
- Avoid overexertion
- Keep wrists in neutral
- Avoid a tight sustained grip
- Take short breaks every hour
- Bend from knees instead of from your back
- Keep back straight
- Rotate activities
- Use padding under the knees when kneeling

If, despite your best efforts, you get a sprain or strain, use the "RICE" principle (rest, ice, compression, and elevation). Once injured, it is important to limit aggravating activities to avoid making the injury worse. If symptoms persist, your doctor may recommend a brace, prescribe an anti-inflammatory and/or make a referral for physical or occupational therapy. For additional information contact Hands On Therapy at 405-780-9919. (by Pamela Jinks, Hands On Therapy)

Summer is for Fall Harvest

David Hillock

Summer may not seem like the best time to be thinking about a fall garden, but in actuality July through September is the time to start planting several vegetable varieties in order to have a fall harvest. Some tender vegetables that can be started in July and August and harvested before fall frosts include beans, cilantro, sweet corn, cucumber, pumpkin and summer and winter squash. Be sure to choose varieties that mature early and are disease resistant. Some semi-hardy plants, those that may continue to grow and be harvested after several frosts, include beet, broccoli, cabbage, carrots, garlic, leaf lettuce, parsnip and radish.

Climatic conditions of July and August involve high soil temperature, high light intensity and rapid drying of the soil, resulting in an increase in the problems of obtaining a uniform stand of plants. Achieving a full stand of plants in the heat of summer may require special treatments. This might include shade over rows when seeded and supplemental watering to reduce soil temperature and aid in seed germination.

Insects and weeds can be more prevalent this time of year so check frequently for insect activity and weed growth and use appropriate control measures. For more information on planting a fall garden see OSU Extension Fact Sheet F-6009 Fall Gardening.

New Fact Sheet – F-6438 Terrariums

David Hillock

We have recently completed a new fact sheet about creating and maintaining terrariums, which is now available via PODS. This fact sheet should replace any older publications on terrariums. Past information regarding soils and other materials, once believed to help with drainage, etc. is not necessary.

A terrarium, a garden in an enclosed glass or plastic container, is a delightful way to grow a collection of small plants. With proper care, a terrarium will create a humid atmosphere, which protects tender, tropical plants that are difficult to grow in the normally dry atmosphere of our homes. Under controlled conditions a terrarium can also help to start new plants from seeds and cuttings.

Upcoming Horticulture Events

Horticultural Therapy Conference

July 11, 2006, OSU – Stillwater Campus

Contact Mike Schnelle at 405-744-7361 or mike.schnelle@okstate.edu

Nursery and Greenhouse Trade Show/Convention

September 28-29, 2006

Payne County Fairgrounds, Stillwater, OK

Poinsettia Open House

November 1, 2006

OSU – Stillwater Research Greenhouse

Tree Care Workshop

November 7, 2006

OSU Botanical Garden, Stillwater, OK

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or stephanie.larimer@okstate.edu.