

Horticulture Tips

May 2015

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

GARDEN TIPS FOR MAY!

David Hillock

Trees and Shrubs

- Prune and feed azaleas immediately after blooming.
- Insect Alert: ([EPP-7306](#))
 - * Bagworms on juniper and arborvitae. (Late May)
 - * Elm leaf beetles and larvae on elms. (Late May)
 - * Mimosa webworms on mimosa and honeylocust.
 - * Lace bugs on sycamore, pyracantha and azalea.
- Soak new transplants and newly planted trees unless rainfall is abundant.
- Pine needle disease treatments are needed in mid-May.

Flowers

- Annual bedding plants can be set out for summer color.
- Plant summer bulbs such as cannas, dahlias, elephant ear, caladiums and gladiolus.
- Shake a leaf over white paper to look for spider mites. If the tiny specks begin to crawl, mites are present.

Fruits and Vegetables

- Plant watermelon, cantaloupe, cucumber, eggplant, okra, sweet potatoes, etc.
- Fruit spray programs should be faithfully continued during the next several weeks.
- Late May is the best time to control borers in the orchard. Check for label recommendations and controls.

Water Gardens

- Clean out water garden and prepare for season. Divide and repot water garden plants.
- Begin feeding fish when water temperatures are over 50°F.

Turfgrass

- Cool-season lawns can be fertilized again. If you did not fertilize cool-season grasses in March and April, do so now.
- Warm-season lawns may be fertilized again in May. ([HLA-6420](#))
- Seeding of warm-season grasses such as bermudagrass, buffalograss, zoysiagrass and centipedegrass is best performed in mid-May through the end of June. The soil temperatures are warm enough for germination and adequate growing season is present to promote winter hardiness.
- Dollar spot disease of lawns can first become visible in mid-May. Make certain fertilizer applications have been adequate before ever applying a fungicide. ([EPP-7658](#))

- Nutsedge plants become visible during this month. Post-emergent treatments are best applied for the first time this month. Make certain warm-season grasses have completed green-up.
- The second application of pre-emergent annual grass herbicides can be applied in late-May or early June, depending upon timing of first application. Check label for details.
- Vegetative establishment of warm-season grasses can continue. ([HLA-6419](#))

How to Produce High Quality Tomatoes

David Hillock

1. Select or prepare soil high in organic matter and sufficiently loose to allow for extensive vigorous root growth.
2. Apply needed fertilizers and mix into the soil prior to planting.
3. Obtain husky plants of recommended nematode and wilt resistant varieties. Set them into the garden as early as weather and recommended planting dates permit.
4. Water in newly set plants with a starter solution.
5. Provide protection from cutworms and other possible pests of the transplanting season.
6. Use mulching materials around plants within one month following planting.
7. Apply supplemental water as needed, drip irrigation being preferred.
8. Control insects and spider mites as well as leaf and fruit diseases if numbers are increasing week to week.
9. Windbreaks may be especially desirable as hot, dry weather develops.
10. Maintain the identity of different varieties to evaluate their qualities and thus determine the more appropriate kinds for future plantings.

For more information on growing tomatoes see OSU Extension Fact Sheet [HLA-6012 Growing Tomatoes in the Home Garden](#).

Transplanting Not So Perfect Tomato Transplants

Lynn Brandenberger

Finding great tomato transplants can sometimes be impossible, so what is a gardener to do? What we want in a tomato transplant is a nice stocky little plant (8-10 inches tall) with 3 to 4 sets of leaves, no flowers, and no fruits, but there are times when we can't find that quality of a transplant so we have to settle for what we can find. The transplant you can find is 15-30 inches in length, has flowers, and may even have some fruit on it. Not what we want, but it is what we have available.

So, how to plant that giant among transplants? Can you just dig a hole two feet deep and plant it? You could, but if you do remember the deeper you plant the colder the soil temperature and the colder the soil temperature the more blossom end rot your tomatoes will

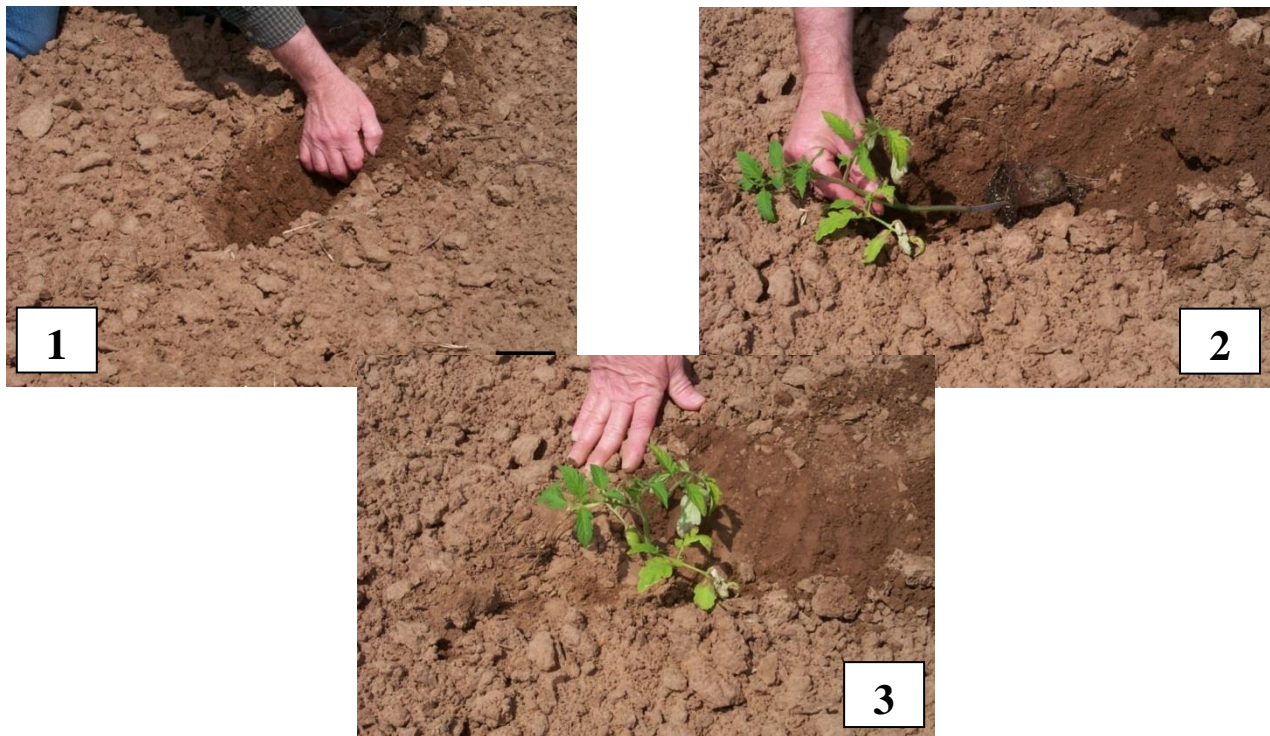


have. We had some colleagues from another state who planted nice and deep and had the courage to actually talk about it publically. What they reported was it took a large portion of the summer before they began to harvest tomatoes without blossom end rot, not a happy gardening tale.

What about planting the giant transplant at the normal depth? Yes that could be done, but with our often windy conditions (30-60 mph winds) having all that plant sticking up out of the ground means it will likely be broken off by the wind.

This isn't sounding very promising is it? Never fear, there is an answer to the problem. The answer is planting the giant tomato transplant using the trench-method of transplanting. Trench-planting involves digging a trench (photo #1) at the depth that tomatoes should normally be transplanted at (3-5 inches). Next you lay the root ball at one end (photo #2) of the trench and bring out only the top 3 to 4 leaves out the top of the trench on the other end. Take the loose soil removed from digging the trench and fill the trench (photo #3). The main stem of the tomato transplant will root out into the filled soil of the trench creating one super root system. Only a small portion of the plant is above the soil line so it will be protected from high winds. Last, since the plant was transplanted at the proper depth it will have much less blossom end rot. I might add that if your other tomato friends are also stuck with the same types of transplants, they will be amazed when you show them your transplanted tomatoes.

Trench Planting Method



Water Saving Tips

David Hillock

Plants need water, but how you water and how much you water can make a big difference in plant health and how much your pocket book is affected. Below are some tips on how to water so you don't waste water or money and have healthy plants.

- Water deeply, but infrequently. Allowing the water to soak into the ground and letting the soil dry out between watering forces plants to produce strong, deep roots.
- Mulch. Mulch retains soil moisture, prevents erosion, controls weeds, and increases soil quality.
- Install a rain sensor. A rain sensor turns the irrigation system off during and immediately after a rain event.
- Don't water hardscapes. Make sure sprinklers are watering the lawn and not the street or sidewalks.
- Avoid heavy pruning. Pruning stimulates growth and your plants will require more water.
- Mature plants require less water. Mature plants and trees have deep root systems and can be watered less frequently.
- Use a rain gauge. Typically, lawns require 1 inch of water per week to stay healthy and up to 2 inches per week to stay green in the summer.
- Take advantage of your downspouts. Direct the downspout to your garden rather than draining towards the street.
- Fix or replace broken sprinkler heads. Take the broken irrigation head with you when buying a new one to ensure you get the right one.
- Adjust your irrigation system. Plants require less water in the fall and winter than in the spring and summer.
- Check for leaks. If you have a sudden increase in your water bill, dry or soggy areas in your yard, or overgrown turf areas you might have a leak.

For more information on efficient watering practices and low water use landscapes see the following OSU Extension publications - [E-1038 A Guide to Saving Water in the Home Landscape](#), [E-1037 Drought-Tolerant Plant Selections for Oklahoma](#), [HLA-6444 Drought-Tolerant Plant Selections for Oklahoma](#), [HLA-6445 Smart Irrigation Technology: Controllers and Sensors](#), [HLA-6610 Simple Irrigation Audit for Home Lawns in Oklahoma](#), [L-332 Xeriscape Demonstration Garden](#), [L-333 Xeriscape Garden Plants](#), [L-434 Irrigation](#), [L-438 Water Saving Design Ideas for Oklahoma Landscapes](#), [L-444 Lawn Watering Tips](#), and [L-450 The Water Conservation Garden](#).

Irrigation and Lawn Tips for May

Joshua Campbell and Justin Quetone Moss

Much of Oklahoma has seen sizeable rain events over the last month; however, a large portion of the state remains in drought. As we approach summer months the variability of rainfall will

increase, making it important to know how to manage your home landscape during periods without rainfall.

During drought, lawn maintenance practices are of particular importance. It is best to mow grass at a proper height of cut, depending on species, in order to reduce overall stress on the lawn. When you water, water thoroughly and as efficiently as possible and consider checking on irrigation systems to make sure they are operating as efficiently as possible.

Irrigation tips:

- Conduct an irrigation system checkup – Check your irrigation system for leaks, and broken or clogged sprinkler heads. You can also conduct an irrigation audit to determine the uniformity of your system and ensure you are not overwatering ([HLA-6610](#)). Monitor your irrigation system regularly to ensure it's not watering streets or sidewalks and make adjustment accordingly.
- When to water – The best time to water is in the early morning hours, just before or soon after sunrise. Most turfgrasses require less water than you might think. Bermudagrass only requires about 1 inch of water per week during most of the summer, but can need more to stay green in dry, hot periods. The most accurate estimate for your turfgrass water needs can be obtained through calculating evapotranspiration rates (ET). A simple way to do this is to visit the Simple Irrigation Plan website (SIP) to learn how much water the lawn needs on a weekly basis. Visit <http://sip.mesonet.org>.

Mowing tips:

Mowing the lawn too low can cause unneeded stress to the turfgrass. It is best to follow the one-third rule. This rule suggests that you should never cut more than one-third of the grass plant during mowing. When too much of the grass blades are cut back the grass slows its root growth and the plant is weakened.

- Mowing heights for common lawn grasses of Oklahoma:
Bermuda (*Cyndon dactylon*): 1 – 2 inches
Buffalograss: 3 inches
Zoysiagrass: 2 inches
Tall Fescue: 3 inches
- Consider leaving your clippings – Leaving clippings on the lawn is usually a better choice versus bagging. Don't be concerned about clippings creating thatch, the clippings break down quickly and will not cause a thatch problem. Bagging may be necessary if there has been considerable time between mowing which result in excessive clippings that may cover the turf area.

Rain Barrels for the Home Landscape

Morgan Hopkins and Justin Quetone Moss

Rain is a highly welcomed weather event in Oklahoma, especially with drought affecting much of the state since 2010. Instead of allowing rainwater to run off pavement and overwhelm storm drains, rainwater harvesting can allow this water to be used as a valuable resource in the landscape. Some states in the United States do not allow rainwater harvesting, but in Oklahoma, rainwater harvesting is allowed and encouraged in many communities. Oklahoma City passed an urban agriculture ordinance that allowed a maximum of two 85-gallon rain barrels in the front yard. Additional rain barrels may be placed on the side of the house, or in the backyard, as long as they are not visible from the street. The City of Oklahoma City has also partnered with the Central Oklahoma Storm Water Alliance on several occasions to offer discounted rain barrels to local citizens for purchase.

Rainwater harvesting with rain barrels offers many benefits related to conservation of water resources and plant health. Collecting rainwater in rain barrels helps reduce the amount of water entering stormwater drains, thus reducing the amount of water released into streams that can cause erosion and pollution. Installing a rain barrel can reduce the amount of flooding in a backyard or basement. Harvested rainwater can serve as an irrigation source for woody plants, herbaceous plants, and lawns, allowing homeowners to reduce the amount of municipal water applied to the landscape. Rainwater harvesting with rain barrels can help homeowners to save money on water bills over time and contribute to overall conservation of local water supplies.

Rain barrels for the home landscape typically range between 50 to 100 gallons in size. To estimate the amount of rain a rain event will generate, the rule of thumb is 0.6 gallons of water will fall on one square foot (sq ft) of roof area during a one-inch rain. A short-cut estimation calculation is: $\text{Roof Collection Area (sq ft)} \times \text{Rainfall (in)} \times 0.623 = \text{Volume (gallons)}$.

Ready-to-use rain barrels are available for purchase at local nurseries or at garden and hardware stores, such as Lowe's, Home Depot, and Wal-Mart. The prices range from \$60 to \$100 or more, depending on features and aesthetics. Homemade rain barrels can also be constructed using recycled feed containers and rain barrel diverter and parts kits available for purchase for approximately \$30. Rain barrels are typically placed, or connected, under the downspout, off of the home gutter system. Rainwater enters through an inlet covered with a screen to prevent mosquitoes, leaves, and other debris from entering the rain barrel. The outlet at the bottom of the rain barrel is a spigot or hose bibb. An overflow outlet at the top of the rain barrel is necessary to divert excess water and a first flush diverter should be installed to avoid contaminants from entering the rain barrel. Rain barrels should be installed on a flat, level surface, elevated with concrete blocks, wood stands or bricks. The elevation increases the pressure, allowing efficient access to the water for use. A gallon of water weighs about 8.5 lbs., and a 55-gallon rain barrel can weigh over 450 lbs. when full, so a stable and secure surface is important. Rainwater is not recommended for human consumption, and rainwater should be used within 7 to 10 days to prevent mosquito development. Rain barrels should also be cleaned at least once a year with one-eighth cup of chlorine mixed in with five gallons of water to prevent algal growth.

For more information, see OCES Fact Sheet [BAE-1757](#) “Design of Rainwater Harvesting Systems for Oklahoma”. You can also visit the OCES water conservation website at <http://thinkwater.okstate.edu> and the OCES low impact development website at <http://lid.okstate.edu>.

It’s Grafting Time!

Becky Carroll

Depending on your location, late April or early May is usually the start of grafting season. When the bark is “slipping” (bark easily peels from wood), it signals the time to start grafting. Remember your graftwood should be stored properly to insure grafting success. Keep it in cold storage until just before going to the field. Then protect it from heat and wind.

The graftwood source list is available online on the pecan webpage at <http://okpecans.okstate.edu/PDFs/graftwood-source>.

Converting small seedlings? Refer to fact sheet 6230 or Four-flap Grafting of Pecans (<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1034/HLA-6230web2011.pdf>). The four-flap or banana graft is used on smaller trees or small limbs, usually less than an inch. The important thing to remember is to size your graftwood to the rootstock or cut portion. Your graftwood should be slightly larger than the rootstock portion.

If you are changing larger trees to another cultivar the bark graft will work best. Fact Sheet 6204 details the process to use on trees up to about 4 inches in diameter. <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1040/HLA-6204web2011.pdf>

Most anyone can be a successful grafter. Have your supplies gathered together to speed up the process. Taking too long and exposing the cut surfaces to drying out can diminish your success. Use good healthy graftwood and vigorously growing rootstock trees to increase your chances of grafting success.

Grafting onto a stressed tree will reduce your chance of being successful. If you have too much damage it may be best to postpone grafting until the next year.

Also, if you have recently planted or transplanted seedlings, let them get established at least a year before trying to graft. The extra stress of grafting on top of the establishment stress can be too much for some seedlings.

The pecan webpage also has several videos to help with learning to graft. *Oklahoma Gardening* and the Noble Foundation videos are posted here to help. <http://okpecans.okstate.edu/pecan-video-resources>.

Greater Peach Tree Borer

Becky Carroll

Most people are concerned with protecting the fruit on their peach trees from insects but they need to be diligently protecting their trees first.

The greater peach tree borer is a clear winged moth that lays eggs on the trunk of the tree near the soil line. The eggs hatch and the larvae tunnel into the trunk feeding on the cambium and inner bark. On small trees, these larvae can kill the tree.

These borers are common in Oklahoma and can overwinter under the bark or below ground level on peaches, wild plum, cherry and other related plants. When temperatures reach 50 degrees, the larvae become active and pupate. Moths usually emerge in mid-May and continue through early June. Females begin laying eggs almost immediately and can lay 200-600 eggs during her short life. About 9-15 days later, the eggs hatch and the larvae begin feeding on the trunks.

Greater peach tree borer must be controlled each year starting with the year the trees are planted and continuing for the life of the tree. In mid-May, commercial peach growers make an application or drench of Lorsban 4E at the rate of 3 qts per 100 gallons. This drench is applied from the scaffold branches to the soil line, covering the entire trunk. The Lorsban should not be applied to the leaves or fruit. This application protects the trunks for the few weeks that the females are laying eggs.

For homeowners, there are few options that can be purchased that are labeled for peach tree borer. Ortho-Bug-B-Gone & Spectracide as well as others make insecticides for home landscape use. Peach tree and peach tree borer must both be on the label to make it legal to apply for the control of the pest. Follow the manufacturer's instructions on when and how to make the applications properly.

Selecting Shrubs for the Landscape

David Hillock

Shrubs serve an important role in landscaping. They can be used as hedge borders, focal points, along the foundation of a home to "tie" it to the ground by softening strong architectural lines, and to fill large areas. Shrubs screen and separate private areas, create garden rooms, and absorb noise. Many are evergreen, providing a backbone for the winter landscape.

Unlike annual flowers, or even some herbaceous perennials, shrubs are usually planted with permanence in mind. As such, it is important to carefully select plants to ensure long-term success. It is important to consider the plant's adaptability to the proposed planting site, as well as its mature size. For best results, choose a plant that is best adapted to the climatic zone or region and will fit in the space designated for planting, even after it reaches full size.

When selecting shrubs for the landscape, it is also important to consider each plant's ornamental characteristics. Consider plant height, width, and shape; foliage color and texture, including fall color; bark attributes; and flowering and fruiting habits, to obtain the right shrub for your landscape design.

For additional information on selecting shrubs, including a list of suggested plants, see OSU Extension Fact Sheet [HLA-6439 Selecting Shrubs for the Landscape](#).

85th Annual Pecan Growers Association Meeting

Becky Carroll

Make your plans to attend the annual Oklahoma Pecan Growers Association Meeting in Ardmore on June 11-13. The details will soon be posted to the OPGA webpage – www.okpecangrowers.com.

The meeting will be held at the Ardmore Convention Center with accommodations at the Holiday Inn. Room reservations should be made by June 1. Use the OPGA group rate for best prices. Commercial exhibitors, educational meeting, state pecan show and pecan food show will be included for the three day event. The Saturday Field Day will be held at the Hauani Creek Ranch. The schedule and meeting agenda will be posted soon to the webpage.

Upcoming Horticulture Events

Current Challenges in Floriculture

June 11, 2015

Wes Watkins Center – Stillwater, OK

For registration and other information visit www.hortla.okstate.edu.

Hunger and Horticulture

July 30, 2015

Food and Agricultural Products Center – Stillwater, OK

GardenFest

September 26, 2015; 10 AM – 4 PM

The Botanic Garden at OSU – Stillwater, OK

Tree Care Issues Conference

October 29, 2015

Wes Watkins Center – Stillwater, OK

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