Horticulture Tips
May 2022

Oklahoma Cooperative Extension Service
Division of Agricultural Sciences and Natural Resources
Department of Horticulture & Landscape Architecture
Oklahoma State University

GARDEN TIPS FOR MAY!

David Hillock, Consumer Horticulturist

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.

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. (HLA-6421)
- 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. (HLA-6421).
- Vegetative establishment of warm-season grasses can continue. (HLA-6419)

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.

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.

Fruits and Vegetables
- Plant watermelon, cantaloupe, cucumber, eggplant, okra, sweet potatoes, etc.
- Fruit spray programs should be faithfully continued during the next several weeks. (HLA-7319).
- Late May is the best time to control borers in the orchard. Check for label recommendations and controls.

Grafting Demonstration in Pontotoc County on May 5, 2022

Becky Carroll, Associate Extension Specialist, Fruit and Pecans

Erin Hubbard, county educator in Pontotoc County is hosting a grafting demonstration at Mr. Glendel Hatton's property just south of Ada. The event begins at 9:30 a.m. at 17135 CR 3580, Ada, OK 74820. Becky Carroll will teach the participants how to do a bark graft and four-flap graft. Please RSVP to Erin if interested in attending.

Pecan Graftwood Sources

Becky Carroll

The updated 2022 Pecan Graftwood Source List is available on the pecan webpage located at http://okpecans.okstate.edu/PDFs/graftwood-source.

For information on variety selection or grafting techniques, check out the webpage http://okpecans.okstate.edu/orchard-establishment-management for fact sheets or http://okpecans.okstate.edu/pecan-video-resources for videos showing different grafting techniques.

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 pocketbook 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.

- Mulching 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.

Fennel

Casey Hentges, Oklahoma Gardening Host
Bailey Lockhart, Project Coordinator

Whether you have an ornamental or a vegetable garden, you should consider planting fennel. Fennel is in the *Apiaceae* family along with carrots, dill, and parsley. And just like these other plants, fennel will grow a large taproot and have an umbel, or umbrella-like, flower structure. While it is considered to be short lived, it is a reseeding perennial to zone 7 and will grow as an annual up to zone 4. It prefers moist, yet well-drained soil, and it can handle a wide range of pH, from 4.8 to 8.2.

If you are an ornamental gardener, you likely have bronze fennel, *Foeniculum vulgare* 'Purpureum', in your garden. Its soft, smokey foliage, adds texture to your garden and is sure to soften the harshest of corners. Bronze fennel is often used as an ornamental plant, or fodder for swallowtail caterpillars. Because of this, it is commonly planted in pollinator gardens as well. Having just one of these plants in your garden is a great way to show and teach young children the lifecycle of butterflies. You can find all life stages of this caterpillar on the plant, starting with the tiny, perfectly round white dots. These will eventually become the small caterpillars that will begin to eat the plant and start growing. These caterpillars can eat a lot, but the bronze fennel can grow to 3 to 4 feet tall and still provide lovely foliage in the landscape. Although we don't typically think about using this fennel for culinary purposes, every part of the plant above ground in edible and can add some color to your dish.

Typically, when we think of fennel for culinary purposes, we think of a white bulb fennel. Fennel Antares F1, *Foeniculum vulgare*, is an All-America Selections winner and the first fennel to be recognized in this program. It has similar foliage as the bronze fennel but will produce a larger bulb at its base. You want to harvest bulb fennel when the bulb reaches the size of a tennis ball. If you wait to harvest after this point, it could bolt as the temperatures warm up. Bolting means the vegetation will begin to grow more while the bulb starts to lose its shape. You can harvest this fennel by cutting just below the bulb. This could result in additional growth from the bulb, which means another harvest later, although it will be smaller. You could also harvest by pulling the plant up and cutting the roots off if you do not want a later harvest.

Although this bulb fennel is edible for people, it is also a desirable food for the swallowtail caterpillars. You can find just as many on this as the bronze fennel, so it is important to

thoroughly inspect your harvest and of course wash it before consuming. Regardless of whether you are using it for the butterflies or yourself, or perhaps both, fennel is a nice plant for the garden.

https://www.youtube.com/watch?v=TH51fo6Zn6E
https://www.herbsociety.org/file_download/inline/520b142e-66f4-45dc-b151-59283956b21e

On-line Courses for Market Gardening

Lynn Brandenberger, Extension Specialist

Market Gardening covers the commercial production of horticultural food crops on a small scale. The OSU Market Gardening School series has been taught live for the past 13 years, but we have had requests for several years for this course to be available on-line for those that were not able to participate in the live course.

Market Gardening on-line courses currently available cover Soil Management and Cool-Season Vegetable Production. Coming soon will be a course on Warm-Season Vegetable Production. These courses are the beginning of what will become a complete series of ten different courses that will include the three mentioned above plus Fruit Crops, Resource Management, Marketing, Pest Management, Season Extension, Irrigation, and Food Safety.

Currently available courses can be found at https://learn.extension.okstate.edu/ which will allow you to sign up to take the courses at your leisure.

Market Gardening 1: Soil Management

This is the first course in the Oklahoma Market Gardening School. It offers prospective market gardeners a solid grounding in soil and fertilizer management.

EXTENSION

Time limit: 60 days
$20

Market Gardening 2: Cool-Season Vegetable Production

This is the second course in the Oklahoma Market Gardening School. It will introduce you to the basic concepts needed to become successful at producing cool-season vegetable crops.

EXTENSION

Time limit: 60 days
$20

Seeing Double Peaches and Nectarines?

Becky Carroll

Many reports have been made of double peaches and nectarines this season. That is a good sign – that we have peaches and nectarines due to lack of a late freeze event! But, having doubles can cause issues with developing fruit.

Why are we seeing a large number of double fruits? This phenomenon occurs when the peach or nectarine tree is initiating fruit buds the year before. Dry or drought conditions can cause the buds to develop multiple carpels in the flower bud instead on one. So, the key to prevention is watering during that important bud formation time in late summer usually during July and August. Not only will watering help with bud development for next season but watering will help size and ripen peaches on the tree this year.

Will double fruit cause the fruit to be inedible? No, but it will look strange and may not ripen properly. Sometimes one fruit will abort and cause a small appendage. The best option is to thin those doubles when it is time to fruit thin. Thinning when the fruit is between dime and quarter sized, at least a month prior to ripening time will give the most benefit. Removing damaged fruit or overcrowded fruit will help with fruit sizing. Four to six inches between each peach is suggested but for even larger peaches, leave eight to ten inches between each peach.

Not thinning will cause small fruit, fruit that doesn't ripen properly, and can break scaffold branches due to the weight of too much fruit. I know that removing peaches or nectarines goes against our human nature, but trust me, you'll be glad you did when you are harvesting large juicy peaches!

Oklahoma Pecan Growers Association Annual Meeting – June 9-11, 2022

Becky Carroll

I don't know about you, but I'm getting excited about the upcoming Oklahoma Pecan Growers Association annual meeting! We will be celebrating the 95-year anniversary of the OPGA!

The Ardmore Convention Center is our meeting location on June 9-11, 2022.

Be sure to reserve your hotel room by May 9, 2022. The OPGA has a block of rooms at the Holiday Inn that joins the convention center. The phone number is 580-226-3333. Ask for the OPGA rate of $109. There are other hotels in the area if you want to stay elsewhere.

A link to register online is found at https://www.okpecangrowers.com/annual-convention.

On Thursday the 9th, registration starts at 12:30 p.m. We will then begin our mini-pecan class at 1:00 p.m. We will offer 2 pesticide applicator CEUs for the Thursday afternoon session. Our terrific vendors will be set up on Thursday and Friday to be available to show the latest and greatest in the pecan world. The 2020 State Pecan Show winners will be displayed for your viewing on Thursday and Friday. Thursday evening, we will have a dinner and social. Always lots of fun visiting with old and brand-new friends.

Friday the 10th is chocked full of pecan fun and education. Plan to bring your best (or pretty good) pecan baked goods to enter in the pecan food show. Registration is from 7:30 – 10:00 a.m. and judging begins at 10:00 a.m. Winners will receive ribbons and Grand Champions have bragging rights for another year plus some great prizes. Those Grand Champions will be auctioned off at the Awards Banquet on Friday evening to benefit pecan research. The educational program will begin at 8 a.m. We are finalizing the program with some expert speakers and relevant topics for our growers. Hope to able to provide another 2 CEUs on Friday.

Saturday the 11th, we will travel to Hauani Creek Pecans near Madill for our field day and lunch. The Savage Family will show us their native and improved pecan trees and highlight their management.

If you are interested in moderating or helping with the field day, please let me know. I can provide registration for those educators assisting with the meeting.

Controlling Caterpillar Pests

David Hillock

Caterpillar pests are common on many landscape plants and can cause mild to severe damage depending on plant species and number of caterpillars present. Control of caterpillars may not be necessary in some instances because their numbers are kept in check by numerous natural enemies such as parasitic flies and wasps, disease, predator insects and birds.

On shade trees, even if the caterpillars become numerous, a healthy tree can withstand a complete defoliation early in the growing season. New transplants or trees weakened by weather or other factors may require control.

Hand-picking caterpillars from flowering plants and vegetables is also an effective method. Most caterpillars are very susceptible to products containing *Bacillus thuringiensis*, such as Javelin®, Dipel® or Thuricide®. This product is less effective on older larvae because they must consume it for effective control. Young and older caterpillars can also be controlled with the naturalyte ingredient spinosad that is found in Conserve® and some retail insecticide products as well as other insecticides that are labeled for these pests in ornamentals. Control is best achieved before caterpillars become full-grown, and it is essential to get thorough coverage, since they are often slightly protected within their "nest". Of course, it is important to select the right product for the given situation and to always read and follow product labels directions.

Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

Growing in Raised Garden Beds

David Hillock

Raised bed gardens are an ideal way to grow vegetables and small fruit. They are elevated a few inches or more above the soil level, and just wide enough to reach across by hand. Plants can be grouped together in a bed with permanent walkways on either side. The soil does not get compacted since the soil in which plants are grown is never walked on.

The idea of growing plants in single file or “row crops,” started with the use of a horse and plow to cultivate crops on a large scale. The straight rows, far enough apart to drive a horse between, made plowing easier. Wider spaces later accommodated tractors and their implements. Not knowing the reasons behind growing crops in rows, many home gardeners plant single row vegetable gardens. However, foot traffic on each side of a single row can severely compact soil by the end of a growing season. The excessive row spacing also wastes garden space that can be planted with crops.

Raised bed gardens can range from a simple rectangular plateau of soil to a more elaborate bed framed in wood, stone and mortar, straw bales or modern snap-together plastic blocks. Although more expensive and time consuming to build, permanent structures will keep soil in place during heavy rains and will look nicer in the landscape. However, for a large garden, several beds of mounded soil are very adequate to achieve desired results. Just make sure plenty of mulch is used on the soil to hold it in place during drenching rains.

Benefits of Raised Beds

Higher Yields. Raised beds allow more garden space for growing plants, with less space utilized for walking paths. Individual plant yields may be slightly less with less space per plant than in traditional rows, but more plants can be grown in each space.

Better Soil. Amendments such as compost and fertilizer are only spread on beds and not wasted on pathways. Looser (non-compacted) soil also drains better. Frequent tillage of the garden can be elimination.

Water Conservation. Plants grown close together shade the soil, decrease evaporation, and keep roots cooler. Water is only provided to the beds and not the pathways.

Fewer Weeds. Closely planted crops keep weeds crowded out. Pathways can be covered in landscape fabric or mulch to choke out weeds.

Extended Season. Soil in raised beds can be worked earlier in the season, because it warms up faster than soil in traditional in-ground gardens. Rainy weather is less of a hindrance to working in the garden since mud is not an issue.

Better Pest Control. Raised bed gardens are easy to cover with insect screening fabric. Crops are easy to rotate from bed to bed — preventing a buildup of pests.

For more information about using raised beds see our fact sheet HLA-6033 – Raised Bed Gardening.

Crop Rotation – An Effective Management Tool

David Hillock

Rotating where vegetables are planted is an excellent way of keeping harmful soil organisms to a minimum. Experienced gardeners know the value of proper crop rotation. They are aware that the same crop planted in the same spot year after year decreases in productivity. This is because soil borne diseases, soil insects, nematodes, and toxic chemical residues tend to collect and build up in each area. As these detrimental factors increase, crop yields decrease. Therefore, it is necessary to rotate the location of vegetables each season.

Each family of vegetables has certain unique effects on the soil, and most vegetable varieties within a given family are susceptible to the same diseases and insects. Therefore, it is important to know which vegetables are included in each family. The common backyard vegetables generally fall into nine distinct families. The pea or legume family includes peas and beans of all kinds. The mustard family is one of the largest, which includes cabbage, collards, brussels sprouts, kale, cauliflower, broccoli, turnips, and radishes. Beets and spinach belong in the goosefoot family. Carrots, parsley, and celery are in the parsley family. The nightshade family includes potatoes, tomatoes, eggplant, and all varieties of pepper. The vine crops are in the gourd family—squash, pumpkin, watermelon, cantaloupe, and cucumber. The composite family is made up of lettuce, dandelion, and artichoke. Onions, garlic, and chives make up the lily family. Sweet corn comes from the grass family.

Remember that just rotating the placement of each single vegetable is not enough. Rotation of family groups is also important.

Very small gardens and the lack of other available space in the landscape often make rotation impossible. However, soil solarization has proven to be very effective for small garden areas. Soil solarization controls a wide variety of soil pests and is a technique commonly used in integrated pest management programs. For more information on soil solarization, see fact sheet EPP-7640.