Garden Tips for April

by David Hillock

Fruit and Nut

- Don’t spray insecticides during fruit tree bloom or pollination may be affected. Disease sprays can continue according to schedule and label directions. (EPP-7319)
- Control cedar-apple rust. When the orange jelly galls are visible on juniper (cedar), following a rain, begin treating apple and crabapple trees with a fungicide. (EPP-7319, HLA-7611)
- Fire blight bacterial disease can be controlled at this time. Plant disease-resistant varieties to avoid diseases.
- Continue spray schedules for disease prone fruit and pine trees.

Tree and Shrub

- Proper watering of newly planted trees and shrubs often means the difference between success and replacement.
- Remove any winter-damaged branches or plants that have not begun to grow. Prune spring flowering plants as soon as they are finished blooming. (HLA-6404, HLA-6409)
- Control of powdery mildew disease can be done with early detection and regular treatment. Many new plant cultivars are resistant. (EPP-7617)
- Leaf spot diseases can cause premature death of foliage and reduce plant vigor.

Flowers

- Most bedding plants, summer flowering bulbs, and annual flower seeds can be planted after danger of frost. This happens around mid-April in most of Oklahoma. Hold off mulching these crops until spring rains subside and soil temperatures warm up. Warm-season annuals should not be planted until soil temperatures are in the low 60s.
- Harden off transplants outside in partial protection from sun and wind prior to planting.
- Let spring flowering bulb foliage remain as long as possible before removing it.

Vegetables

- Wait a little longer for it to warm up before planting cucurbit crops and okra.
- Plant vegetable crops in successive plantings to ensure a steady supply of produce rather than harvesting all at once.
- Cover cucurbit crops with a floating row cover to keep out insect pests. Remove during bloom time.
- Watch for cutworm damage and add flea beetle scouting to your list of activities in the vegetable garden.

Garden Planting Guide for Warm-Season Vegetables

Vegetable	Time to Plant*	Days to Harvest	Method of Planting
Bean, Lima	April 15-30	90-120	Seed
Beans, Green or Wax	April 10-30	50-60	Seed
Beans, Pole	April 10-30	60-90	Seed
Cantaloupe	May 1-20	80-100	Seed or Plants
Cucumber	April 10-30 or later	50-70	Seed or Plants
Eggplant	April 10-30	80-90	Plants
Okra	April 10-30 or later	60-70	Seed
Pepper	April 10-30 or later	90-110	Plants
Pumpkin	April 10-30	90-120	Seed
Southern Pea	May 1-June 10	85-100	Seed
Squash, Summer	April 10-30 or later	40-60	Seed or Plants
Squash, Winter	May 15-June 15	110-125	Seed or Plants
Sweet Corn	Mar. 25-April 30	80-100	Seed
Sweet Potato	May 1-June 10	100-120	Plants
Tomato	April 10-30	70-90	Plants
Watermelon	May 1-20	90-120	Seed

*These dates indicate planting times from southeast to northwest Oklahoma. Specific climate and weather may influence planting dates. For Cool-Season Vegetables, the soil temperature at the depth where the seeds are planted should be at least 40°F.

Landscape - General

- Hummingbirds arrive in Oklahoma in early April. Get your bird feeders ready using 1 part sugar to 4 parts water. Do not use red food coloring.
- Keep the bird feeder filled during the summer and help control insects at the same time.
- Lace bugs, aphids, spider mites, bagworms, etc. can start popping up in the landscape and garden later this month. Keep a close eye on all plants and use mechanical, cultural, and biological control options first.
- Be alert for both insect pests and predators. Some pests can be hand picked without using a pesticide. Do not spray if predators such as lady beetles are present. Spray only when there are too few predators to be effective.

Lawn

- Warm-season grass lawns can be established beginning late April from sprigs, plugs, or sod. (HLA-6419)
- Fertilizer programs can begin for warm-season grasses in April. The following recommendations are to achieve optimum performance and appearance of commonly grown species in Oklahoma.
  - Zoysiagrass: 3 lbs N/1,000 sq. ft./year
  - Bahiagrass: 3 lbs N/1,000 sq. ft./year
  - Buffalograss: 2 - 3 lbs N/1,000 sq. ft./year
  - Buffalograss/grama mixes: 3 lbs N/1,000 sq. ft./year
  - Bermudagrass: 4-6 lbs N/1,000 sq. ft./year
  - Centipedegrass: 2 lbs N/1,000 sq. ft./year

    - St. Augustinegrass: 3-6 lbs N/1,000 sq. ft./year
- When using quick release forms of fertilizer, use 1 pound of actual nitrogen per 1,000 sq. ft. per application; water in nitrate fertilizers. (HLA-6420)
- Mowing of warm-season lawns can begin now (HLA-6420). Cutting height for bermudagrass and zoysiagrass should be 1 to 1½ inches high, and buffalograss 1 ½ to 3 inches high.
- Damage from Spring Dead Spot Disease (SDS) becomes visible in bermudagrass (EPP-7665). Perform practices that promote grass recovery. Do not spray fungicides at this time for SDS control.
- Grub damage can be visible in lawns at this time. Check for the presence of grubs before ever applying any insecticide treatments. Apply appropriate soil insecticide if white grubs are a problem (EPP-7306). Water product into soil.

Pecan Graftwood Sources

Becky Carroll

The updated 2018 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.

Onion Care and Handling

Jim Shrefler

Whether in a home or market garden, onions are a favorite of many vegetable growers. If you planted onions from transplants this year they should begin vigorous growth soon, if they have not done so already. Do not overlook the need for nitrogen fertilizer for producing large onions. Unless you have a garden with very fertile soil, now is the time to apply nitrogen fertilizer to enable vigorous growth. Two possible sources are ammonium nitrate or urea. A rough estimate of how much of these fertilizers to use is ¼ of a pound for 20 feet of row. Scatter the fertilizer along the 20 feet distance so that it covers 1 ½ feet on each side of the row. Do not put the fertilizer directly on the plants and do not concentrate it at the base of the plants. Doing so could cause injury to shallow plant roots. Fertilizer can be left on the surface or scratched lightly into the soil surface. Water gently following fertilizer application.

Primary pest problems observed in onions in southeast Oklahoma in recent years include thrips, purple blotch, and black mold. There are additional pests that affect onions one should also watch for. Thrips are tiny insects that feed on the leaf surface. Heavy infestation will result in leaves taking on a silvery appearance. Thrips are most easily observed when leaves are gently separated at the onion neck. The insect will appear as tiny yellow or dark colored specks that move when disturbed. Although tiny, thrips can be very damaging to onions. Two species are commonly present; onion thrips and western flower thrips. The two species are not readily distinguished by an untrained observer. Insecticide treatment for thrips will depend on the particular producer's situation. Inspect onions frequently to determine if the plants have an infestation. Contact your County Extension Office for information on insecticides to use for thrips.

Fungal diseases are another concern in onions. Healthy leaves are needed to produce an onion bulb. Diseases of the foliage can quickly destroy healthy plants. Purple blotch is one of these and it is first observed as tiny water-soaked lesions on the leaves. If conditions are suitable the lesions can enlarge and destroy the leaf. The way to control purple blotch is to use preventive fungicide applications. This means the fungicide needs to be applied before the disease is observed. The threat of this disease is greatest under rainy, wet and humid conditions. When conditions such as these are forecast, the use of fungicide in advance of the wet weather is highly recommended. Your County Extension Office can provide information on suggested fungicides for purple blotch and other vegetable diseases.

Finally, black mold is a disease that was observed in onions harvested last summer during a rainy period. The onion bulbs appeared normal at harvest but began to develop a black powdery material under the dry outer scales. This was a mold that infected onions due to extremely wet conditions at harvest. Suggested control measures are to store onions at temperatures below 60. Note that storage at temperatures cooler than provides additional benefits. Avoid bruising onions during harvesting and handling.

Growing Vertically

David Hillock

Back in the 1970s the average backyard vegetable garden was about 1,000 square feet. Now it is typically 200 square feet. New houses tend toward smaller yards, so the farm model of growing food and the generous space it required has become obsolete. Contemporary vegetable gardening borrows the best design ideas from the past, while incorporating new technology and materials to make smaller vegetable gardens easier to manage, and more productive.

The Value of Vertical

Combined with raised boxed beds the potential for dramatically increased production with vertical growing is enormous. Plants grown vertically can be planted more closely together and produce more in the rich, friable soil of a properly managed soil or raised bed. Because they take up only a few inches of surface soil, there remains lots of bed left to be intensively planted with low-growing vegetable plants.

Another benefit is you don’t have to bend over or stoop to tend to or harvest the plants. This can be very beneficial to those with disabilities allowing them to participate in gardening and enjoy the benefits of being outdoors. Other benefits include a sense of accomplishment, as well as assist with strength, mobility and hand-eye coordination.

A trellis is one mechanism to grow vertically, but green walls are also an option. Build a vertical garden from pallets and plant it with herbs and annuals. The herbs could be easily harvested for use in the kitchen and the flowers provided beauty as well as attracted beneficial insects to help control unwanted pests. Another option is to use columnar plants. There are several cultivars of apples, for example, that grow very narrow making them perfect for small landscapes.

Erecting vertical supports can be time consuming. Free-standing ones provide flexibility in placement, but are precarious, tending to collapse part way through the season from the weight of maturing crops. The planks that enclose a raised bed offer a convenient

place to attach year round fixtures that make setting up and taking down trellises quick and easy. They make it possible to have a flat trellis system that runs along either side of the bed that is stable, yet easily reconfigured to facilitate crop rotation. Using walls and fences to train plants vertically or to create a green wall will also provide strength and stability to the trellis and will add beauty and utility to the landscape.

Additional benefits to growing plants vertically, especially vegetables, is listed below.

Benefits to Vegetables of Vertical Growing:

- Better air circulation
- Better access to sunlight
- Less exposure to soil pathogens
- Easier to harvest
- Dry off faster after rain
- Less likely to be curled or deformed

(Portions of this article was taken from an article courtesy of National Garden Bureau, original author Liz Ball, titled More Food in Less Space, edited for Oklahoma)

Controlling Insects in the Landscape and Garden

David Hillock

It is not uncommon to see insects such as aphids already on plants in the landscape and garden; I usually ignore them. Most likely there will be some natural predators around, like lady beetles, and they will probably take care of the problem without having to reach for the insecticides. Doing frequent scouting through the landscape and garden is a good practice to get into. Most insect and disease problems can be handled without pesticides if you catch them early enough. Insect control can often be done by cultural and mechanical methods such as crop rotation, handpicking, a hard stream of water or using barriers like row covers and collars to protect young stems of plants. Using resistant varieties whenever they are available is highly recommended. Insecticide products that are safer for the environment are also available for different situations; use these whenever possible.

Seven Steps to landscaping Your Yard for Wildlife

David Hillock

1. Set your objectives and priorities. Decide which types of birds or other animals you may feasibly attract given the habitat surrounding your yard and already in place (for example, whether the area is open, forested, etc.). Organize your landscape design accordingly using plants that you know will work best for you.
2. Draw a map of your property. A map will help determine how much available space you have and other features about your yard. A map can help you experiment with different designs, keeping in mind those areas that are shady, sunny, wet, dry, or scenic.
3. Review the basic needs of birds (food, water, shelter, cover) and determine those components already present in your yard and those that may be lacking. Check the tables for listings of plants to determine which plants are appropriate for your area that you may want or need to obtain. Realize that while your yard and garden may not provide all of the necessary components, your neighbor's yards may contain some of these. Emphasize native plants!

4. Check with natural resource professionals and various reference books at your library or bookstore for practical tips.
5. Develop a planting plan. It is important to draw shrubbery and trees at full or mature size to plan for space needs. Determine how much money you are willing to spend. Realize that you do not have to plant it all in one season. Use native plants where possible.
6. Implement your plan. Shop local nurseries and garden centers as well as catalogues of plant and seed suppliers to determine the availability of plant materials. Keep records of your expenses and take pictures as your plan develops.
7. Maintain your plan. This involves watering, fertilizing, pruning, weeding, and mowing. Remember, native plants will be more forgiving of lack of care and will require less maintenance than many exotics. Maintaining nest boxes and feeders on a regular basis is also necessary.

Upcoming Pecan Grafting Demonstrations

Becky Carroll

Ottawa County – April 20 at 10 a.m. Contact Courtney May to find out more information. courtney.l.may@okstate.edu
Payne County – May 1 at 6:30 p.m. Keith Reed will have more information on this program. keith.reed@okstate.edu
The Noble Research Institute is hosting a grafting demonstration on April 24. Visit www.noble.org for registration information.

Annual OPGA Meeting Scheduled

Becky Carroll

The 2018 Oklahoma Pecan Growers' Association Annual Meeting will be held June 14-16. Information will be available online at www.okpecangrowers.com. The location will be Downstream Resort & Casino near Quapaw, Oklahoma in the far northeastern part of the state. Tours of Miller Pecan Company near Afton will start the program on Thursday followed with a reception at Downstream that evening. Friday will be filled with educational programs, vendor on site, pecan food show and state pecan show display. Saturday will be spent at the Kansas State Pecan Research Station near Chetopa with a special tour from Dr. Bill Reid.

Horticulture Field Day slated for May 17

Becky Carroll and Lynn Brandenberger

For updates on fruit and vegetable programs at the Cimarron Valley Research Station, make plans to join us at the Field Day on May 17 near Perkins. Topics will include a new demonstration fruit tree orchard, cover crops for vegetables, cauliflower and cabbage trials, getting started with drip irrigation in vegetable crops, blackberry plots, and beekeeping equipment. The field day will begin at 1 pm on the Northern entrance to the research station. More information will be posted online soon.