



HORTICULTURE TIPS



Division of Agricultural Sciences & Natural Resources * Oklahoma State University

February 2018

GARDEN TIPS FOR FEBRUARY

David Hillock

Trees & Shrubs

- Fertilize trees, including fruit and nut trees and shrubs, annually. ([HLA-6412](#))
- Most bare-rooted trees and shrubs should be planted in February or March. ([HLA-6414](#))
- Finish pruning shade trees, summer flowering shrubs and hedges. Spring blooming shrubs such as forsythia may be pruned immediately after flowering. Do not top trees or prune just for the sake of pruning. ([HLA-6409](#))
- Look for arborvitae aphids on many evergreen shrubs during the warmer days of early spring.
- Gall-producing insects on oaks, pecans, hackberries, etc. need to be sprayed prior to bud break of foliage.
- Dormant oil can still be applied to control mites, galls, overwintering aphids, etc. ([EPP-7306](#))

Fruit & Nuts

- Spray peaches and nectarines with a fungicide for prevention of peach leaf curl before bud swell. ([EPP-7319](#))
- Mid-February is a good time to begin pruning and fertilizing trees and small fruits.
- Collect and store graftwood for grafting pecans later this spring.
- Begin planting blackberries, raspberries, strawberries, grapes, asparagus and other perennial garden crops later this month.
- Choose fruit varieties that have a proven track record for Oklahoma's conditions. Fact Sheet [HLA-6222](#) has a recommended list.

Flowers

- Force spring flowering branches like forsythia, quince, peach, apple, and weigela for early bloom indoors.
- Forced spring bulbs should begin to bloom indoors. Many need 10 to 12 weeks of cold, dark conditions prior to blooming.
- Feed tulips in early February.
- Wait to prune roses in March.

Turf

- A product containing glyphosate plus a broadleaf herbicide can be used on dormant bermuda in January or February when temperatures are above 50 degrees F for winter weed control.

Vegetables

- Cool-season vegetable transplants can still be started for late spring garden planting.
- By February 15 many cool-season vegetables like cabbage, carrots, lettuce, peas and potatoes can be planted. ([HLA-6004](#))

General

- Base any plant fertilization on a soil test. For directions, contact your County Extension Educator.
- Provide feed and unfrozen water for your feathered friends.
- Clean up birdhouses before spring tenants arrive during the middle of this month.
- Avoid salting sidewalks for damage can occur to plant material. Use alternative commercial products, sand or kitty litter for traction.

- Join *Oklahoma Gardening* on your OETA station for the start of its season beginning in February. Saturdays at 11:00 a.m. and Sundays at 3:00 p.m.

Winter Irrigation

Dustin Harris, Justin Quetone Moss, Joshua Campbell, and Samantha Snyder

As the state has remained especially dry throughout January, it is important to consider the irrigation needs of your landscape. Although the majority of your vegetation may be dormant, your landscape may be in need of some supplemental water. It's often overtly apparent that evergreen plants and cool-season grasses still require water during the winter, but allowing the desiccation of the soil can also be detrimental to your dormant, perennial plants. Warm-season grasses, flowering bulbs, and deciduous trees also continue to utilize small amounts of water throughout the winter, but, more importantly, the soil moisture serves as a buffer against rapid changes in the soil temperature.

While considering if your landscape may need some supplemental irrigation this month, now is also a great time to consider applying mulch to your ornamentals to enhance your water use efficiency. The general recommendation for mulch applications is to apply it to a 3-inch depth. As you may realize, adequate use of mulch not only reduces irrigation needs, but it also aids in reducing weed pressure.

Earth-Kind Landscaping

Justin Quetone Moss, Joshua Campbell, Dustin Harris and Sam Snyder

Earth-Kind is a plant trial and landscape design and management system first established at Texas A&M University. While the Earth-Kind name is often connected to roses because of the national Earth-Kind rose trials; Earth-Kind trials actually encompass annuals, perennials, shrubs, and trees, as well as vegetables and turfgrass.

The Earth-Kind landscaping system applies research-proven horticulture techniques to produce maximum garden and landscape performance while preserving and protecting the environment. The Earth-Kind system combines the best practices of organic and conventional gardening and landscaping principles to create a horticultural system based on real world effectiveness and environmental responsibility.

Earth-Kind landscaping encourages landscape water use efficiency; the reduction of fertilizer and pesticide usage, understanding the energy conservation benefits of landscape plants and the reduction of landscape waste that enters landfills. The emphasis is creating beautiful, easy-care landscapes, while conserving and protecting natural resources and the environment.

Oklahoma State University's Department of Horticulture and Landscape Architecture will be hosting an Earth-Kind Landscape Design and Management School on February 9-10, 2018 at the Oklahoma County Extension Conference Center. The workshop will provide 8 hours of Earth-Kind landscape design and management education and provide participants resources for getting started with their landscape projects. Topics will include irrigation and water conservation, soil health, plant selection, turf management and landscape design.

The cost is \$95 per household or commercial business (fee admits two). Register by calling the Oklahoma County Cooperative Extension office at 405-713-1125.

Deadline Approaching for 2018 Pecan and Grape Management Courses

Becky Carroll

Brochures are now available detailing the 2018 Pecan and Grape Management Courses. The courses offer an opportunity for potential new or veteran growers to learn or refresh their basic management skills needed to successfully grow pecans or grapes. The classes meet one afternoon a month beginning February 27 for pecan and March 1 for grape and continuing for the growing season. Having the classes through the season gives participants the chance to see what management requirements are necessary at specific times. Students learn in both the classroom and in the orchard or vineyard setting. The classes meet at the Cimarron Valley Research Station near Perkins. Classes also travel to a couple

of pecan orchards or established vineyards/wineries to learn from other growers. Class dates and other information is available in the brochure.

The cost to enroll in either the pecan or grape course is \$250 per student. Registration for the pecan course is due by February 13 and grape deadline is February 15. County extension educators are encouraged to enroll in the courses.

The link to the brochures are online at http://okpecans.okstate.edu/pecan-management-course/2018/2018_course or http://www.grapes.okstate.edu/grape-management-course/2018/2018_brochure. Please share this information with interested clientele.

Control Peach and Nectarine Leaf Curl Now!

David Hillock

It is common to get calls in early summer by homeowners wanting to know what is wrong with their peach or nectarine tree. Infected leaves pucker, become deformed, and turn yellow or reddish-brown. Unfortunately, by that time, when symptoms are most evident, it is too late to spray anything. Leaf Curl is the culprit and is one of the most commonly encountered diseases in unsprayed orchards and home yards during cold, wet springs. Diseased leaves eventually wither and fall from the trees. Although new leaves emerge from dormant buds, their growth requirements reduce yield and may weaken the trees.

To prevent leaf curl disease, spray peaches and nectarines with a fungicide before bud swell ([EPP-7319](#) Home Tree Fruit Production and Pest Management). Apply when the trees are dormant and temperatures are above 40 degrees F, usually mid-February through March depending on weather and location in the state. Bordeaux mixtures, copper flowable fungicides, chlorothalonil, and lime-sulfur sprays are commonly used for control of leaf curl.

Cutting Back Ornamental Grasses

David Hillock

Ornamental grasses should be cut back in late winter before new growth emerges. It can also be done in fall, but the seed heads provide nice winter interest, and some birds will also feed on the seed, plus the now dead foliage takes on nice natural tones of gray, brown, tan, gold to orange, and sometimes red depending on the species and cultivar. The movement of ornamental grasses as they sway in the wind also adds interest to the otherwise bleak winter garden.

To make the job easier, you can tie up the stalks with string. Depending on the size and density of the grass you may use any of the following tools: house scissors, shears (electric shears are fantastic, especially on large clumps) or hand pruners. For smaller grasses, trim to about 2 to 3 inches from the ground; for larger grasses cut 6 to 8 inches from the ground. One exception is Mexican feather grass (*Nassella tenuissima*), it does not like to be cut back hard; instead give it a very light trim, cutting only about a third to not more than half of the foliage back.

Horticulture “Spray Day” – March 8, 2018

Becky Carroll

Need to learn about spraying? Whether conventional or organic production, all growers will benefit from this event. This is a field day opportunity to learn about proper spraying – not really the what, why or when to spray, but how. The Cimarron Valley Research Station will host the event with registration beginning at 8:30 am on March 8. Pre-registration is needed to be able to provide lunch for the group. Contact 405-744-5404 or email Stephanie.Larimer@okstate.edu to sign up for the day.

Morning rotation sessions will include topics on reading labels; worker protection standards and recordkeeping; pesticide storage and container disposal; nozzle selection and drift control; personal protective equipment; and hints, tips, and ideas for easier spraying.

During the lunch, provided by AgCredit, the group will hear from several vendors planning to showcase their spray equipment. Afternoon rotation demonstrations will include sprayer maintenance; handheld/backpack sprayer calibration; boom sprayer calibration and airblast sprayer calibration.

The group will then divide into commodity groups – pecan, fruit/grape and vegetable for demonstrations and discussion in the field appropriate to each group.

Winding up the day around 4 pm, the group will meet back for discussion, evaluations and door prize giveaway. For more information contact becky.carroll@okstate.edu or lynn.brandenberger@okstate.edu.

Grape Pruning Workshop Scheduled for March 9, 2018

Becky Carroll

The Grape Pruning Workshop will be held on March 9, 2018 at the Cimarron Valley Research Station in Perkins, OK. Registration will begin at 8:30 am and the workshop will end at 12:30 pm. Presentations include principles of pruning; pruning sanitation and cleanliness; pruning methods and techniques; and a hands on demonstration in the vineyard.

Speakers include Justin Scheiner and Michael Cook of Texas AgriLife. Participants are welcome to bring pruning tools. Dress appropriately for weather conditions.

There is no charge for the workshop. For registration information call 405-744-5404 or email Stephanie.Larimer@okstate.edu. For all other information contact becky.carroll@okstate.edu.

Sponsored by the Oklahoma Grape Industries Council, Oklahoma State University Horticulture and Landscape Architecture and the Cimarron Valley Research Station.

Getting a Head Start – Growing Plants from Seed

David Hillock

Earliness, economy of space, and lengthening of the growing season may be obtained by transplanting many vegetables instead of sowing the seed directly in the field or garden. Moreover, with some kinds of vegetables, it is almost impossible to establish good stands from seed sown directly in the field or garden.

Growing transplants requires skill and care. Factors such as light, temperature, humidity, watering, and the physical condition and fertility level of the plant-growing media must be considered.

Starting the Plants

Two basic systems are used for starting seedlings:

1. Seeding directly in small pots or growing containers.
2. Seeding into flats and later transplanting into growing containers.

The first method involves less handling of the small plants. Vine crops (cucumbers, muskmelon, watermelon, pumpkin, and squash) must be directly seeded into growing containers since they will not survive if transplanted as seedlings.

When seeding is done in flats, seeds are sown in rows two or three inches apart. Seed should be distributed eight to ten per inch in the rows.

For good germination the soil must be kept moist. To help maintain proper temperature (temperatures vary between 60 and 95 degrees F depending on species) and moisture for germinating seeds, the flats or pots may be covered with plastic until the seedlings break through the soil.

Growing On

As soon as seedlings emerge they should be grown at a somewhat lower temperature than that required for germination. The soil surface should be wet only as often as necessary to keep the young plants growing.

Low light, excessive nitrogen, and high temperature cause excessive stem elongation. Seedlings exposed to a high light level (full sunlight) will mature quicker and produce higher quality transplants.

Most growers begin transplanting seedlings when the first true leaves are forming, usually two to three weeks after sowing seed. Some prefer to begin when the plants are quite small. Set the seedling slightly deeper than it was growing in the seedling flat. Take care in firming the soil around the plant to avoid injuring the tender stems. Water seedlings thoroughly immediately after transplanting to prevent excessive wilting.

Transplants should never be overwatered except to flush excess salts from the growing medium. Slight wilting of plants periodically is not harmful. Adjust water, temperature, and nitrogen fertilizer to control growth when plants are growing too fast.

Gradually harden plants for a week before transplanting them into the field or garden. Hardening prepares plants to withstand conditions such as chilling, high temperatures, drying winds, and water shortages. Withholding water, nitrogen fertilizer, and moderately lowering temperature are the best ways to harden transplants. Avoid over-hardening transplants since this will cause the plants to resume growth slowly after being set in the field or garden.

A young transplant is much better than an old transplant. One of the most common errors made by transplant growers is to start plants too early in the season. When held, transplants become too old and woody and are slow to resume growth after transplanting.

For maximum season's yield, transplants should never have fruits, flowers, or flower buds before transplanting. An ideal transplant is young, growing fairly rapidly, but slightly hardened at transplanting time. It should never be over-hardened or too soft when transplanted. Rapid growth following transplanting assures a well-established plant before fruit develops.

Follow these steps to produce disease-free transplants:

- (1) Use disease-free seed or seed treated to rid it of disease-causing organisms.
- (2) Use plant growing containers free of disease-causing organisms.
- (3) Use a planting medium free of disease-causing organisms.
- (4) Follow strict, "kitchen clean," sanitary practices.
- (5) Keep plants and soil from remaining wet for long periods of time.
- (6) To help prevent damping-off diseases, it may be necessary to use fungicide sprays or drenches.

For more information about growing vegetables see fact sheets [HLA-6020](#) Growing Vegetable Transplants, [HLA-6004](#) Oklahoma Garden Planning Guide, and [HLA-6032](#) Vegetable Varieties for the Home Garden in Oklahoma.

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.

Fruit Elimination on Ornamental Trees

David Hillock

Every summer we get calls from homeowners who are dealing with messy fruits from landscape trees. Unfortunately, when we receive these calls it is usually too late to do much about it that year. Fruit control is possible, but timing is critical and must be done when flowers and fruits are forming in spring/early summer. Of course the best approach is to

plant trees that don't produce messy fruits or if you still have an appreciation for the fruiting characteristics, make sure you locate the plant in the landscape where the fruits can fall, but not be a nuisance. You could also consider planting fruitless varieties. These come as sterile forms of the tree species or in some cases as male selections. Some species produce male and female trees; obviously the female trees have the potential for producing those unwanted fruits; the males won't produce fruit. For example, fruitless sweetgum varieties are available like 'Rotundiloba' which is a sterile or near sterile variety of sweetgum; Kentucky coffeetree is an example of a species with male and female plants, the most common male selection being 'Espresso'.

If you are just stuck with existing trees in the landscape that produce those annoying fruits, you have some chemical options. Two types of chemical products are available for fruit control. Ethephon is a plant growth regulator that when applied to plants reacts by liberating ethylene, which interferes with the plant growth process resulting in reduction or elimination of fruit. The only product registered in Oklahoma that is packaged for the homeowner is Florel® Brand Fruit Eliminator by Monterey Lawn and Garden Products. This product should be applied to the tree when it is in mid-to full-bloom and temperatures should be between 65-95 degrees Fahrenheit. The plants should also not be under stress. Complete coverage is necessary to achieve satisfactory control. This may be a problem for the homeowner who is trying to control fruits on a large, mature shade tree such as sweetgum or sycamore, but may be an option for a smaller ornamental tree like crabapple. Most homeowners won't have the equipment to reach high into large trees and get complete coverage so they have to hire a pesticide applicator or arborist to do the work. Drift should also be avoided as it may cause temporary modifications to plant growth of nearby plants. Of course, always be sure to read and follow all label directions!

The other products registered for use can only be applied by an arborist or commercial pesticide applicator. The products are applied as a trunk injection, usually at the beginning of bud break for best results.

Snipper (active ingredient IBA) is a product applied as a trunk injection and should be applied by a licensed professional. The active ingredient IBA is a plant hormone, which promotes premature drop of flowers. It also must be applied at flower bud break and will have to be applied yearly to get satisfactory control.

Pinscher (Dikegulac-sodium) is another trunk injection product that must be applied by commercial applicators. Timing of application is different depending on the species of tree, but still must be applied annually.

No matter which chemical approach you choose, both will need to be repeated yearly. Remember, the best approach is to plant trees that don't produce those annoying fruits.

What is ThinkWater?

Sam Snyder, Justin Quetone Moss, Joshua Campbell, and Dustin Harris

Water. It comes out of the faucet, out of the hose and out of the sprinkler head, but where does it come from before that? Water touches every part of life and it gets used without getting much thought. Think Water is a campaign hoping to change that mindset.

Water is the lifeblood of our landscapes. Without it, our lawns and flowers may have a much different appearance. While most of the plants are still deep in their winter slumber; ThinkWater would like to encourage all water users to discover the source of their personal water. Not just is it city or well, but where does the actual water come from? A lake, an aquifer or is it purchased from another source? If you have a well that you irrigate with, what is the name of the aquifer being used? How wide and deep is that source?

The goal of ThinkWater is not to scold homeowners for using water, or to transform the world into a cactus society, but rather to develop a connection to the water. When you put a 'face to the name' in a sense - there is a new-found respect of how the water is used and also how it can be protected.

A quick internet search can typically get to the answer pretty quickly. Or maybe even a phone call to your utilities department. Or better yet, contact the ThinkWater team at Oklahoma State University at <http://ThinkWater.okstate.edu>. So, ThinkWater challenges you - Do you know where your water comes from? The answer might just surprise you.

OCES ThinkWater Mission Statement: ThinkWater educates Oklahomans to responsibly use water through implementation of sustainable irrigation and landscape practices that preserve Oklahoma's precious water resources, benefitting our economy and people.

2018 Oklahoma Proven Selections

David Hillock

Each year a set of plants is chosen by horticulturists that will help consumers choose plants appropriate for Oklahoma gardens. The program began in 1999 by selecting a tree, shrub, perennial and annual worthy of Oklahoma landscapes. A Collector's Choice plant was not chosen this year. There are many plants to choose from; selections for 2018 are listed below. To see all the plants recommended by the Oklahoma Proven Plant Selection Program, visit our newly overhauled web site at <http://www.oklahomaproven.org/>.

Tree – *Zelkova* species, Japanese Zelkova

Zelkova serrata is a deciduous, tree with a vase-shaped habit that typically grows 20-80 feet tall and most often occurs in rich, moist woods and hillsides and moist stream banks. It is noted for its graceful shape, clean foliage, attractive bark and resistance to Dutch elm disease. Zelkova has in fact been promoted in recent years as a substitute for American elm (*Ulmus americana*) because of its resistance to Dutch elm disease. Quite wind and drought tolerant once it is established. Cultivars from the Chinese cousin are also available. Fall color is variable and may range from yellow, yellow or orange bronze, orange, red and reddish purple depending on cultivar.

Notable cultivars available include *Z. serrata* 'Schmidtlow' Wireless® growing about 25 feet high and 35 feet wide; 'Ogon' ('Bright Park') has golden yellow leaves and coral stems; 'Musashino' is narrow upright to about 45 feet high, but only 20 feet wide; and 'JFS-KW1' City Sprite™ is a compact, dense, semi-dwarf tree growing about 25 feet high and 20 feet wide.

Exposure: Full sun or light shade

Soil: Tolerates wide variety of soils

Hardiness: USDA Zone 5-8

Shrub – *Lespedeza thunbergii* subsp. *thunbergii* 'Little Volcano' and 'Gibraltar', Bush Clover

Bush Clovers are hardy semi-woody, deciduous shrubs reaching about 4 to 6 feet high and at least as wide with arching stems. In harsh winters it can die to the ground, but quickly comes back the following spring. Late winter, early spring pruning may be necessary to rejuvenate the plant, but since flowers develop on new wood, flowering will not be affected. Flowers are rosy-purple in late summer to early fall, which completely cover the plant and stands out nicely against the blue-green foliage. Bush Clovers perform well in sandy, infertile soil and are very drought tolerant once established; ideal drainage is essential.

'Little Volcano' is a selection from Japan and is more upright with dark green foliage and red-purple flowers. Foliage turns golden after bloom in the fall. 'Gibraltar' Bush Clover, found at the old Gibraltar estate in Wilmington, Delaware, is a spectacular selection named by plantsman Bill Frederick with long, arching stems also covered in rosy-purple flowers from late summer to early fall.

Exposure: Sun to part shade

Soil: tolerates poor, infertile soil; excellent drainage is essential

Hardiness: USDA Zone 6-10.

Perennial – *Spigelia marilandica*, Indian Pink

Indian pink, also called woodland pinkroot and pinkroot, is a native species to the Southeastern U.S. It is an excellent plant for shady gardens. Indian pink is an upright, multi-stemmed clump forming perennial 1-2 feet tall and 1 ½ feet wide with bright, glossy green leaves. Numerous flowers appear in late spring/early summer and are tubular, deep red with a

contrasting yellow throat that flares at the tip to form five pointed lobes (a yellow star). Indian Pink grows in part shade to full shade in moist soils, but does really well in full sun and is quite drought tolerant once established.

Use Indian pink in a woodland garden, perennial border, or native garden. Hummingbirds and butterflies are attracted to the beautiful, tubular flowers.

Exposure: Sun, part shade

Soil: Moist or dry soils, but well-drained

Hardiness: USDA Zone 5-9

Annual – *Petunia 'Ustuni6001'*, Supertunia® Vista Bubblegum®

Supertunia Vista Bubblegum is a vigorous petunia that requires very little care once established. Unlike some other petunias Vista Bubblegum is a self-deadheading variety that blooms continuously until the first killing frosts. With its bright bubblegum pink flowers Vista Bubblegum is a mounding, trailing form to 18-24 inches high and just as wide that looks spectacular spilling over the edge of a container or retaining wall or spreading out in a flower bed.

For the most vigorous plants fertilize them with a slow release fertilizer at planting and then follow up throughout the summer with a water soluble fertilizer applied when watering. Even though no dead-heading is needed, Vista Bubblegum responds well to a light trimming in early July.

Exposure: Full sun to part shade

Soil: Moist, well-drained soil

Hardiness: Use as an annual

For more information about Oklahoma Proven go to <http://www.oklahomaproven.org/> or contact David Hillock, 405-744-5158, david.hillock@okstate.edu.



The *Horticulture Tips* newsletter distributed monthly (except January) by the following:

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McAlester, OK 74501
918-423-4120 www.oces.okstate.edu/pittsburg

This newsletter is one way of communicating horticultural information to those interested.

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