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

GARDEN TIPS FOR AUGUST!

David Hillock, Consumer Horticulturist

Vegetables

- August is a good month to start your fall vegetable garden. Bush beans, cucumbers, and summer squash can be replanted for another crop. Beets, broccoli, carrots, potatoes, lettuce, and other cool-season crops can also be planted at this time. (HLA-6009).
- Soak vegetable seed overnight prior to planting. Once planted, cover them with compost to avoid soil crusting. Mulch to keep planting bed moist and provide shade during initial establishment. Monitor and control insect pests that prevent a good start of plants in your fall garden.

Fruit and Nut

- Continue protective insect applications on the fruit orchard. A good spray schedule is often abandoned too early. Follow directions on last application prior to harvest. (EPP-7319)

Trees and Shrubs

- Discontinue deadheading roses by mid-August to help initiate winter hardiness.
- Watch for second generation of fall webworm in late August/early September. Remove webs that enclose branches and destroy or spray with good penetration with an appropriate insecticide.

Lawn and Turf

- Winter annual weeds like *Poa annua*, better known as annual bluegrass, and chickweed and henbit can be prevented with a preemergence herbicide application in late August. Water in the product after application. (HLA-6420)
- Areas of turf with large brown spots should be checked for high numbers of grubs. Mid-to-late August is the best time to control heavy white grub infestations in the lawn. Apply appropriate insecticide if white grubs are a problem. Water product into soil. (EPP-7306)
- Tall fescue should be mowed at 3 inches during the hot summer and up to 3½ inches if it grows under heavier shade. (HLA-6420)
- For areas being converted to tall fescue this fall, begin spraying out bermudagrass with a product containing glyphosate in early August. (HLA-6419 and HLA-6421)
- Irrigated warm-season lawns can be fertilized once again; apply 0.5 lb N/1,000 sq ft in early to mid August.

- Brown patch of cool-season grasses can be a problem. (HLA-6420)

Flowers

- Towards the end of the month, divide and replant spring-blooming perennials like iris, peonies, and daylilies if needed.

General

- Water compost during extremely dry periods so that it remains active. Turn the pile to generate heat throughout for proper sterilization.
- Always follow directions on both synthetic and natural pesticide products.
- Watch for high populations of caterpillars, aphids, spider mites, thrips, scales, and other insects on plant material in the garden and landscape and treat as needed. (EPP-7306)
- Water all plants thoroughly unless rainfall has been adequate. It is better to water more in depth, less often and early in the morning.

Protect Your Home from Wildfire with Firewise Plantings

David Hillock

Wildfires have been raging in the western state but luckily, we have been blessed with good rainfall to keep things relatively green; however, weather can always change and become hot and dry, and we are no strangers to wildfires. Even winters can be very dry increasing the potential for wildfires. Lives, homes, livestock, pastureland, crops, and thousands of miles of fencing can be lost to the flames.

Although a wildfire does not discriminate among its victims, there are some steps homeowners can take to help protect their property from fire, whether it be a wildfire or an accidental fire at home caused by a charcoal grill during a cookout.

The key to keeping a fire at bay is to not provide fuel for the fire. There are plants and shrubs available that are more fire-resistant than others. Fire-resistant plants are those that don't readily ignite from a flame or other ignition sources. Although the plants themselves can be damaged or killed by a fire, their foliage and stems don't significantly contribute to the fuel and, therefore, the fire's intensity.

Seeing a need for information for homeowners, several agencies, including Oklahoma State University Cooperative Extension, joined forces in the early 1990s and coined the term Firewise. This became a catalyst for educational resources and programs to help homeowners, communities, and firefighters to make sensible choices in the wild land/urban interface, which would in turn help control wildfires and protect property.

When selecting plants to include in a Firewise landscape, homeowners need to identify plants with a low flammability rating for areas nearing the home. By selecting plants with certain characteristics, you can reduce the flammability potential of your landscape and provide habitat for wildlife. There are several factors that influence the fire characteristics of plants, including plant moisture content, age, total volume, dead material, and chemical content.

Plants with low flammability don't accumulate large amounts of combustible dead branches, needles or leaves as they grow. They also have little dead wood and tend not to accumulate dry, dead material within the plant. They have open, loose branches with a low volume of total branches. Many of our deciduous trees and shrubs are fire resistant.

Leaf characteristics is something else to consider. Leaves that are moist and supple, such as the sedum leaf, are more resistant to fire.

Many herbaceous perennials make excellent Firewise plantings. Some remain green in the winter, which in turn reduces their flammability.

Oils and resins found in the sap of some trees and plants such as pine, juniper, cedar, and Yaupon holly, makes them extremely flammable. Homeowners who want to use these plants and trees in the landscape should avoid placing them adjacent to their homes and other structures on the property.

In addition, plants that accumulate dry or dead material such as twigs, needles and leaves should not be planted against the house. This includes many vines like trumpet creeper and ornamental grasses. In winter, these plants have large amounts of dry material and are extremely flammable, allowing a wildfire to spread rapidly.

As you plan out a new landscape or add to an existing one, be sure to consider fire potential in your plant selections. For more information on Firewise, please visit www.firewise.org.

How Much Irrigation Water does a Peach Tree Need?

Becky Carroll, Associate Extension Specialist

Will my peach trees benefit from irrigation? Yes, for sure!

Water is so important for good quality fruit production. Without adequate moisture, fruit will not size well and may not ripen properly. Late summer drought during flower bud initiation can also produce peaches next season that are "doubles". We had large numbers of double peaches this season because of dry conditions late summer in 2021. Also, when a large rainfall is received after irregular watering, fruit can split and crack due to the rapid uptake of water. Plus, if you have a period of drought and growth is limited at any time, the growth loss cannot be recovered that year. Consistent watering from pit hardening to the final swell will result in the largest fruit.

A mature peach tree with a crop needs about 30 gallons of water per day especially during July and August. Should you water every day? No, watering 2 to 3 times per week to provide the needed moisture will be best. If you receive a rain, count it as about 50% efficient toward the tree's needs.

How can you get more specific or tailor your irrigation schedule? Tensiometers, moisture meters, or watermark sensors at about 24 inches deep can give a good idea of the moisture at the rootzone where most of the water is taken up. Another irrigation tool is using pan evaporation readings to replace about 60% of the water lost due to temperature, humidity and wind. The pan of water is experiencing similar conditions to your trees If you lose ½ inch in evapotranspiration, you'll need to water 0.3 inches. Trees without a crop need less replacement, maybe about 40%.

What type of irrigation system works best for applying water? Drip irrigation is normally the system of choice because you lose less to evaporation and the humidity is less under the tree (less disease pressure). On a mature tree, 4 emitters (2 on each side) work well. The entire root system does not have to be irrigated. On sandy soils, drip emitters may not provide enough water to get a good wetting pattern. Micro-sprinklers are a good option to apply more water volume over a larger area. Just make sure they are not spraying the foliage.

If you can't set up an irrigation system, what can you do?

- Plant trees further apart. Give them about 25 feet between trees to reduce competition with other trees.
- Control weeds around the tree. Weeds compete for water and nutrients.
- Using an annual ryegrass cover crop early season in a peach orchard aids soil water retention and suppressed weeds in test plots. Ryegrass is allowed to grow until it begins competing for water in June, and then killed in place to create a mulch. This was tested at the research station and yield was not increased but fruit size was larger than the standard herbicide strip system.
- If water is limited, concentrate on the last 3 weeks prior to harvest. Fruit ripening requires a great deal of water to develop big juicy peaches.

A ripe peach is about 88% water. Without enough irrigation, the peach will not be a large or juicy. Peaches acquire 2/3 of their volume during the last 30 days ripening. Not much beats a fresh tree ripened peach, providing that irrigation will help get the best quality.

Other management needs to grow the best peaches can be found on OSU Fact Sheet 6244 https://extension.okstate.edu/fact-sheets/planting-and-early-care-of-the-peach-orchard.html.

Loring peach harvested on July 26, 2022.

Controlling Winter Annual Weeds in Turf

David Hillock

Annual bluegrass, rescuegrass, cheat, and downy brome are winter annual grassy weeds. Chickweed and henbit are winter annual broadleaf weeds. For winter annual weed control with herbicides, apply a preemergent herbicide two weeks prior to germination (winter weeds begin germination in late August to early September, if moisture is available; annual bluegrass and chickweed are effectively controlled with preemergence herbicides) or soon after their emergence (October and November) when weeds are young and actively growing. Portrait or Gallery provides good preemergence control of winter annual broadleaf weeds but no control of winter annual grasses weeds. Some preemergence herbicides control both winter annual grasses and broadleaves. All preemergence herbicides must be applied prior to germination and "washed" into the root-zone soil where weed seeds are located. Postemergence control of winter broadleaf weeds in bermudagrass, Kentucky bluegrass, centipedegrass, perennial ryegrass, tall fescue and zoysiagrass is with 2,4-D, dicamba, and MCPP combinations applied in October and November. *Note: preemergence herbicides should not be used if planning to overseed or establish cool-season grasses this fall.* Always read and follow all pesticide label instructions.

Pecan Crop Load Thinning

Becky Carroll

Although pecan crops may be spotty in some areas due to overcropping on some cultivars last year, many pecan growers with improved varieties should be checking crop loads to determine if they need to mechanically thin their pecans. On the largest fruited pecans such as Mohawk and Maramec only about 45-50% of the terminals should have clusters, medium-large sized like Pawnee, 50-60 % and on smaller varieties, like Kanza, 60-70% of terminals can be fruiting. If more terminals are fruiting than recommended, the pecans should be thinned. Native pecans do

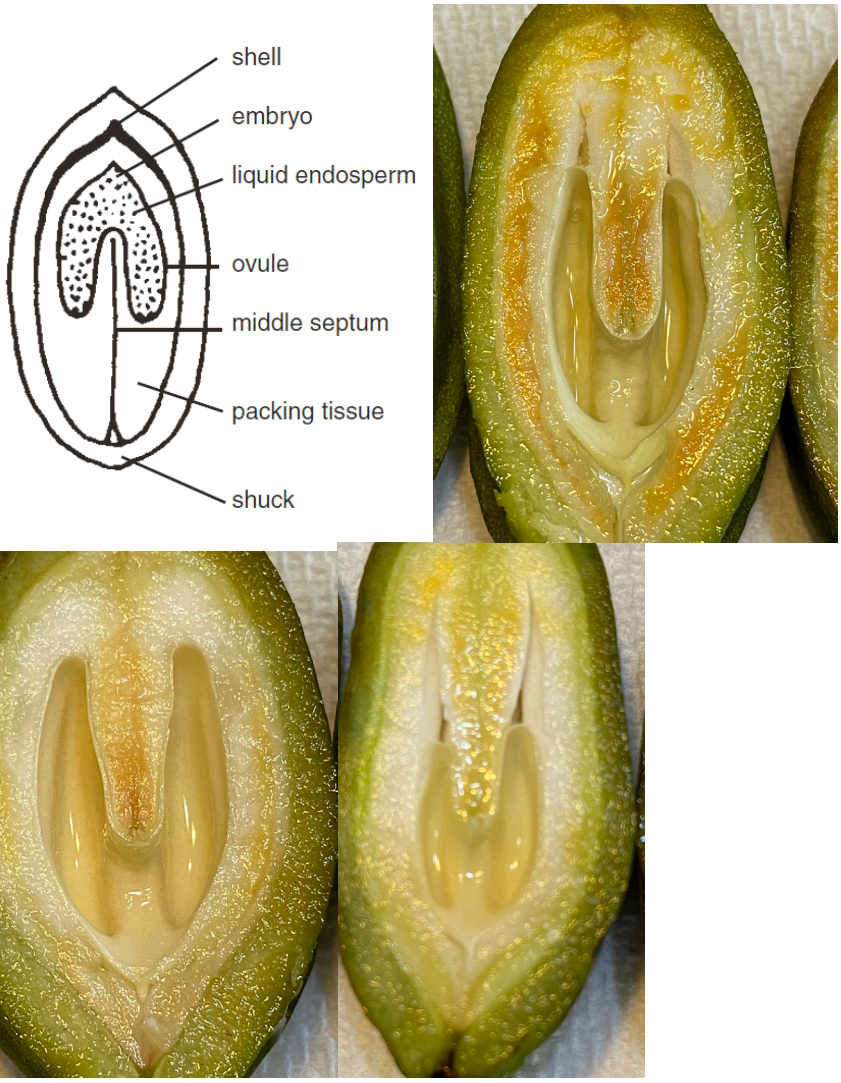
not warrant crop management due to less inputs for economical production. Homeowners can use frailing poles to reduce the number of pecans on their trees for more consistent production. Pecans that drop are mostly water at this stage and will dry up and be thrown out the harvester with other trash. In landscapes, dropped nuts can be collected and discarded.

Crop load thinning is usually done the first week or two of August or more specifically when the pecans are in the water stage when the ovule has expanded between 50-100%, (see figure and pictures below). Just as peaches and apples are thinned, pecans will greatly benefit from crop load management. Thinning the fruit load will increase fruit quality, fruit size and kernel percentage. It will also help reduce alternate bearing. Pecans are an alternate bearing crop, producing a large crop one year and reduced or no crop for the next year or two. When the tree is overcropped, it is using all its reserves to ripen the crop plus trying to initiate fruit buds for the

following season. Fruit thinning also can reduce the possibility for and severity of winter freeze damage. Many growers have said that they should have reduced their crop last year especially on Pawnee because they have a reduced crop of Pawnee this year. Even though total yield will be reduced following crop thinning, marketable yield may be even greater due to increased quality.

Pecans can be mechanically thinned with a conventional shaker fitted with donut pads. Be sure to keep the underneath of the flaps on the donut pads greased to help limit barking the trees. Fact Sheet HLA-6251 – Pecan Crop Load Management details the procedure.

A video demonstrating how to determine crop load, pecan development, and equipment used is available at https://youtu.be/yHgkFur7nGs. It shows the thinning process from the ground and tree top level with drone footage.



The drawing shows a pecan cut longitudinal exposing the ovule at 50% expanded. These August 5, 2021, photos show the differences in ovule expansion. The top picture is a Pawnee showing the ovule expanded to about 80%, left photo is Kanza at 100% and the right is Maramec at around 40%.

National Pesticide Information Center

David Hillock

Have questions about any pesticide-related topic? The National Pesticide Information Center (NPIC) is a national toll-free telephone and internet service that provides objective, science-based information about a wide variety of pesticide-related subjects to the public and to professionals. NPIC answers thousands of questions a year on numerous pesticide topics, including pesticide products and active ingredients, recognition and management of pesticide poisoning, toxicology, and environmental chemistry. NPIC also provides referrals for laboratory analyses, investigation of pesticide incidents, emergency treatment information, safety information, health and environmental effects, and cleanup and disposal procedures. NPIC produces many types of publications including research papers, frequently asked questions, annual reports, outreach materials, podcasts, and other resources available to the public. NPIC can assist people in over 240 different languages using an over-the-phone language service with staff trained in medical and scientific terminology. This same service is used by numerous poison control centers across the United States. This service is sponsored cooperatively by Oregon State University and the U.S. Environmental Protection Agency (EPA).

NPIC operates from 8:00AM to 12:00PM Pacific Time, Monday – Friday. Call 1-800-858-7378, or email us at npic@ace.orst.edu, or go to http://npic.orst.edu/.

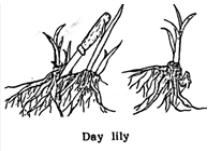
Dividing Perennials

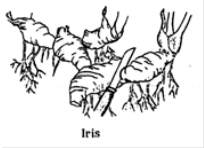
David Hillock

As perennials mature, they often need dividing to encourage vigor and continued performance. Luckily the plants provide us a few clues when it is time to divide them - smaller leaves and fewer flowers, weaker stems, the center becomes open, and all the growth is on the perimeter of the clump, or it may have just outgrown its spot.

The general rule for when a perennial should be divided is opposite its flowering time. So, a plant that flowers in the spring can be divided after it flowers, usually in late summer or fall. Late August is a good time to start dividing these types of perennials in Oklahoma. Some plants don't care when they are divided, but in any case, care should be taken to ensure survival of the new transplants.

Start by digging a trench around the outside of the clump and then lift the entire clump from the ground. Using a sharp knife or spade begin cutting the clump up into smaller clumps about the size of your fist or a gallon sized perennial. Each section should have at least three healthy buds or shoots.





Discard the older unproductive portions and the weak spindly portions and keep the more vigorous sections. Remove any diseased parts and make clean cuts to any damaged roots.

Prepare the area by digging wide, shallow holes to accommodate the roots. Place the plant sections in the holes by spreading the roots out over the ground and cover them back up. The crown of the plant should be at the same depth as it was before dividing it. Planting too deep may delay or completely hinder flowering of some species. Water the plants and keep the soil moist for several weeks to encourage new root growth.

Successful Fall Gardening Starts with Good Plant Establishment

David Hillock

Gardening is a year-round activity. Those who garden develop an appreciation and a desire for fresh, nutritious vegetables and fruits. In many situations, the best way to obtain fresh vegetables is to grow them at home.

Some of the best quality garden vegetables in Oklahoma are produced and harvested during the fall season when warm, sunny days are followed by cool, humid nights. Under these climatic conditions, plant soil metabolism is low; therefore, more of the food manufactured by the plant becomes a high-quality vegetable product.

Successful establishment of a fall garden starts with the planting of seeds and obtaining transplants made available in the garden centers.

Climatic conditions of July and August involve high soil temperature, high light intensity, and rapid drying of the soil, resulting in an increase in 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.

Viable seed, to germinate or sprout, must have the proper temperature, adequate moisture, and sufficient oxygen. The surface of the soil, when exposed to the summer sun, may become very hot (140°F). Vegetable seeds should be planted no deeper than three times the diameter of the seed. With small seed such as carrot, this would be no more than 1/4 inch deep. At this depth and exposed in the hot soil, death of the seed due to high temperature would probably occur. It is also likely that such a soil, even when watered, might dry out quickly because of the high temperature. Unless the soil remains moist at the depth where the seeds have been planted, germination will not take place.

To achieve proper temperature and adequate moisture, apply mulch over the row following planting and watering or use materials such as screen wire strips, shade cloth, or boards to cover the row. This will moderate both soil temperature and soil moisture. Remove covers after seedling emerges.

Another desirable practice is to open the soil for the row somewhat deeper than in spring planting. The seeds are planted in this furrow, covered, and watered. In this manner, only the narrow trench would be watered, thus conserving a limited water supply. Later, one may cultivate along the sides of the row and fill soil to the same level of the remainder of the garden. In so doing, one may cover small grass and broadleaf weed plants that might be growing in the row.

Some vegetables are most easily grown by planting seeds in a small seed flat, setting them in individual containers to grow for approximately one month, and then transplanting them to the garden. Those that respond most favorably to this method of handling include broccoli, cauliflower, Chinese cabbage, leaf lettuce, Brussels sprouts, and cabbage.

Prior to setting them in the garden, transplants may be conditioned or toughened by a reduction in the amount of water supplied and by exposure to full sunlight. This might require three to five days. Plant them in the garden in late afternoon to early evening to reduce transplanting shock. Water the plants as they are set. A water-soluble fertilizer may be used at this time, if necessary—following label directions.

To achieve maximum germination of lettuce seed, the planted and watered seed flat should be kept cool. This can be accomplished by placing the seed flat in a cool (60° to 70°F) location for four or five days, at which time seed may begin germinating. The seedlings should be transplanted to individual containers within a few days.

When purchasing transplants in the fall from the garden center be sure to inspect them carefully for unwanted pests. Transplants coming from the greenhouse may also need to be conditioned before setting them directly into the garden. For additional tips on establishing a fall garden see OSU Fact Sheet HLA 6009 – **Fall Gardening**.

Fall Planting Guide

Table 1. Tender Vegetables - (harvest before frost*). Many varieties will do well – select varieties that are early maturing and disease resistant.

Kind	Time to plant	Method of Planting	Between Rows (inches)	In the Row (inches)	Depth to Cover Seed (inches)	Days from planting to Harvest
Beans, Bush	Aug. 10-20	Seed	18-24	3-6	1	50-60
Beans, Cowpea	July 15 – Aug. 1	Seed	18-48	6-12	1.5	75
Beans, Pole	July 15-30	Seed	24-36	12-18	1	60-70
Beans, Lima	Aug 10-20	Seed	18-24	4-8	1	70-80
Cilantro	July 15–Aug 1	Seed	9	4	.5	When plant is 4-6 in. tall
Corn, Sweet[3]	July 15	Seed	36	12-18	1	80-100
Cucumber	Aug 10-20	Seed or Plants[2]	36-32	12-30	.5 to .75	60-70

Eggplant	July 15	Plants	36	18	-	80-90
Pepper	July 15	Plants	36	24	-	90-110
Pumpkin	July 15-30	Seed or Plants[2]	36-60	30-48	1	100-120
Summer Squash	July 15- Sept. 1	Seed or Plants[2]	36	24-36	1	40-50
Winter Squash	July 15-30	Seed or Plants[2]	36-48	30-48	1	100-120
Tomatillo	July 15	Plants	48	24-36	-	90-100
Tomato	July 1–15	Plants	48	24-36	-	70-90

1 = There may be advantages to planting earlier if soil moisture and climatic conditions are favorable
2 = Set plants into the garden 1 to 1 1/2 months after planting the seed.
3 = Be vigilant about scouting for fall armyworms in whorl of seedlings and young plants.
* Unless using a cold frame or row covers to extend the season.

Table 2. Semi-hardy vegetables - (may continue to grow and be harvested after several frosts). Many varieties will do well – select varieties that are early maturing and disease resistant.

Kind	Time to plant	Method of Planting	Between Rows (inches)	In the Row (inches)	Depth to Cover Seed (inches)	Days from planting to Harvest
Beet	Aug 1-15	Seed	12-18	3-4	.5-.75	60-70
Broccoli	July 15- Aug 15	Plants	18-30	16-20	-	70-80
Brussel Sprouts	July 15- Aug15	Plants	18-30	16-20	-	90-100
Cabbage	Aug 1-25	Plants	18-24	16-20	-	75-90
Chinese Cabbage	Aug 1-25	Seed or Plants[1]	12-16	10-18	.5	75-90
Carrots	July 15- Aug 15	Seed	12-18	1-2	.25	70-80
Cauliflower	Aug 1-25	Plants	18-24	16-20	-	70-80
Collards	Aug 1- Sept 1	Seed or Plants[1]	30-36	18-24	.5	75-85
Garlic	Sept 1-Oct. 15	Bulbs (cloves)	12	4	2	Early June the following year
Irish Potato	Aug 1-15	Seed potatoes	30-42	10-16	2	90-110
Kale	Sept. 1	Plants	24-36	18	-	50-65
Kohlrabi	Sept. 1	Plants	18-24	4-6	-	50-70
Leaf Lettuce	Aug 1-15	Seed or Plants[1]	12-18	2-3	.25	60-70
Leek	Sept. 1	Seed or Plants[1]	12-24	2-4	.5	Late spring the following year
Mustard	Sept. 10- Oct 10	Seed	12-18	2-3	.5	40-50
Onions	Sept. 1	Seed, Sets, or Plants[1]	12-18	4	.25	Late spring the following year
Parsnip	July 15-Aug 15	Seed or Plants[1]	12-18	4-6	.25	120
Peas, green	Aug 15-Sept. 1	Seed	36	2	2	60-90
Radish	Aug 15- Oct 10	Seed	8-12	.75-1	.5	20-40

Rutabaga	Aug 15- Sept 15	Seed	24-36	3-4	.5	80-90
Spinach	Sept 5-25	Seed	8-12	1-2	.5	50-60
Swiss Chard	Aug 1- Sept 15	Seed	24-30	2-3	.5	50-60
Turnip	Aug 1- Sept 15	Seed	12-24	2-3	.5	50-60

1 = Set plants into the garden 1 to 1 1/2 months after planting the seed.

Note: If planting or sowing into cold frames, plant two weeks later than date indicated. With our abundant winter sunshine, be sure to allow for ventilation. Also, check frequently for pests – especially aphids.