

Horticulture Tips

October 2021

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

GARDEN TIPS FOR OCTOBER!

David Hillock, Consumer Horticulturist

Turfgrass

- You can continue to replant or establish cool-season lawns like fescue.
- The mowing height for fescue should be lowered to approximately 2 ½ inches for fall and winter cutting.
- Broadleaf weeds like dandelions can be easily controlled during October. ([HLA-6601](#))
- Mow and neatly edge warm-season lawns before killing frost.

Ornamentals

- Plant cool-season annuals like pansies, ornamental cabbage or kale, snapdragons and dusty miller when temperatures begin to cool.
- Begin planting spring-flowering bulbs like tulips, hyacinths, crocus and daffodils.
- Good companion plants for bulbs are ground covers such as ajuga, vinca, English ivy, alyssum, moneywort, thrift, phlox, oxalis and leadwort.
- Peonies, daylilies, and other spring-flowering perennials should be divided or planted now.
- Dig and store tender perennials like cannas, dahlias, and caladiums in a cool, dry location.
- Purchase trees from nurseries and garden centers at this time to select the fall color you prefer.
- Many perennials can be planted at this time and the selection is quite nice.
- Plant fall mums and asters and keep them watered during dry conditions. Don't crowd since they take a couple of years to reach maturity.
- Plant container-grown trees and shrubs this month.
- Check and treat houseplants for insect pests before bringing them indoors and repot rootbound plants.

Fruits & Vegetables

- Dig sweet potatoes and harvest pumpkins and winter squash.
- Remove green fruit from tomato plants when frost threatens.
- Harvest oriental persimmons and pawpaws as they begin to change color.
- There is still time to plant radishes and mustard in the fall garden.
- Use a cold frame device to plant spinach, lettuce and various other cool-season crops for production most of the winter.

- Plant cool-season cover crops like Austrian winter peas, wheat, clover, and rye in otherwise fallow garden plots.
- Remove all debris from the garden to prevent overwintering of various garden pests.
- Start new planting bed preparations now with plenty of organic matter.

Water Gardens

- Take tropical water garden plants indoors when water temperatures near 50°F.
- Close the water garden for the winter by placing hardy plants in the deeper areas of the pool. Stop feeding the fish.
- Cover water gardens with bird netting to catch dropping leaves during the winter months.

Pecan Topics for October

Becky Carroll, Associate Extension Specialist, Fruit and Pecans



Join us for the October 8 webinar discussing timely pecan topics. The webinar begins at 1 p.m. Pecan Topics for October is open to anyone with an interest in pecans - homeowners, hobbyists, and commercial growers. In-service credit is available to extension personnel.

Chad Selman of Selman Nut Company in Skiatook will discuss selling your crop. Tips for how to sell nuts from yard trees to commercial wholesale production will be offered. Mike Rose, Mayes County Extension Educator, will teach us how to get a proper soil sample and why it's important. Becky Carroll will give some methods for wildlife control, updates on the crop and look at pecan development.

Register in advance for this meeting:

<https://dasnr.zoom.us/meeting/register/tJAsce2grzwuGNxiJcJSagT8L42bX6YBiCa->

After registering, you will receive a confirmation email containing information about joining the meeting.

Information and recordings of previous sessions are available on the Oklahoma Pecan Management webpage- <http://okpecans.okstate.edu> or the Oklahoma Pecan Management Facebook page - @okpecans.

Questions can be emailed to becky.carroll@okstate.edu.

U.S. Department of Agriculture Grants Available

Bizhen Hu, Extension Specialist, Small Farm & Urban Horticulture Vegetable Production

The U.S. Department of Agriculture (USDA) announced it will soon publish Requests for Applications (RFAs) for new grant programs - the [Pandemic Response and Safety \(PRS\) Grant](#) program and the [Seafood Processors Pandemic Response and Safety Block Grant](#) program - to support agricultural stakeholders who haven't yet received substantial federal financial assistance in responding to the COVID-19 crisis. These grant programs will provide assistance to small businesses in certain commodity areas, including **small scale specialty crop producers and processors**, shellfish, aquaculture and other select producers, meat and other processors, distributors, **farmers markets**, seafood facilities and processing vessels. Approximately \$650 million in funding is available for the PRS grants and \$50 million is available for SPRS. All of these new programs are funded by the Pandemic Assistance provided in the Consolidated Appropriations Act of 2021.

Click this link to see the full announcement: <https://www.ams.usda.gov/press-release/usda-invests-700-million-provide-relief-small-producers-processors-distributors>

Bringing Tropical Bog Plants Indoors

Casey Hentges, Host, Oklahoma Gardening

Laura Payne, Assistant Producer, Oklahoma Gardening

Tropical bog plants can be expensive, so why not turn that tropical annual into a perennial. If bog plants are protected from the cold days of winter, chances are high they will make a comeback during the warmer temperatures of spring.

Bog plants are different than water plants because they don't need to be completely submerged in water, they just need consistently moist soils. It is easy to turn a bog plant into a house plant by simply setting the plant into a deep container that doesn't have any holes.

Start by pulling the potted bog plant out of the water garden and cleaning it off. Place the plant in the container without the holes and fill with a couple inches of water. Keep an eye on the water level and refill as the plant uses the water or as it evaporates. On occasion, rinse the container and replace with fresh water.

If the bog plant is too large to bring indoors, divide it like an ornamental grass by cutting the plant in half or quarters and repotting the portion you want to keep.

Because these are tropical plants, they need as much light as possible during the winter, so put them in the sunniest window possible. Bog plants won't give you much new growth indoors during the winter but will give you a head start for your water garden next spring.

A few tropical bog plants to try are Umbrella Palm, Papyrus and Taro.

The Magic of Autumn

David Hillock

I remember as a kid growing up in Iowa the awesome fall colors of the many maples, ashes, oaks, and other species common to the area. We would rake the leaves up into big piles and then play in them for hours. It was even legal back then to burn your leaves and roast marshmallows and hotdogs over the fire (now-a-days it is prohibited in most communities). Much of Oklahoma can also have spectacular fall displays. But what causes those green leaves to turn colors in the fall?

The green in leaves is chlorophyll, which is responsible for catching the sun's energy and converting it into energy for plant growth. During the summer the chlorophyll is high and masks other pigments in the leaf. When fall approaches the chlorophyll declines and the other pigments shine through. Pigments that are present include anthocyanins, which are purple and red, and carotenoids and tannins which provide the yellow, orange, and brown hues.

Weather conditions play a vital role in our fall colors. Ideal weather conditions that lead to the spectacular fall colors are bright sunny days and cool nights. Prolonged warm spells in the fall and cloudy rainy weather can lead to poor fall color. Dryer soils in fall, but not drought conditions, also lead to brighter fall colors.

Fall is an excellent time to plant trees and shrubs. It is also a good time to select plants for their fall color. Some plants are selected for vivid fall colors and propagated in a way that the fall color is consistent from year to year if weather conditions cooperate. Some species are grown from seed so genetics provides widely variable fall color from plant to plant. For example, Caddo sugar maple and Chinese pistache grown from seed will provide an array of fall color from yellow-green to vivid orange and red. For species such as these, observing them in the garden center in the fall allows you to select the colors you are interested in.

Raking Basics

David Hillock

Fall is soon upon us, and it is time to begin thinking about what you will do with all those leaves. Just bagging them and letting them go to the landfill is a waste of our tax dollars and of a valuable garden resource. Instead of bagging them and hauling off to the dump this year consider these suggestions.

Use as a Mulch – An easy way to get rid of leaves is to simply rake them onto the perennial beds as a nice winter mulch. Some say that leaves may suffocate your plants but use your good judgment. Small leaves generally will not offer any threat, but huge leaves, such as sycamore, might.

Compost Them – Place them in the compost pile along with other garden plant material. You don't need a special compost bin to accomplish this process. A big hole dug behind the garage or some other inconspicuous place works nicely. Fill the hole with lots of leaves and other garden plant material.

Mow 'Em – This is the method I like to use. I simply mow over them as often as necessary before they build up too deep. The chopped leaves return valuable organic matter and nutrients to the soil. If you use a mower with a bag attachment you can capture the chopped leaves and then distribute them as needed. They work well as an excellent mulch, compost fodder, or can be worked into your vegetable garden.

Leaf Power – If you have tons of leaves, you may consider buying or renting a vacuum-shredder. This is more effective than just blowing them around with a blower. Vacuum-shredders suck up the leaves, chop them, and then collect them into a bag. Use as described above. Remember, however, that shredders, blowers, and choppers work well only when the leaves are nice and dry. If they're too wet, they'll just clog.

Back to Nature – If you own a wooded area or large property where you can dispose of leaves, go for it. However, remember that too many leaves can suffocate existing plants, so spread them out a bit.

Fall - A Good Time to Control Broadleaf Weeds

David Hillock

Summer temperatures make it too risky to use the broadleaf postemergence herbicides due to the volatility and threat of drift, which could then damage desirable plants in the landscape. However, the cooler daytime temperatures associated with fall make it an excellent time to think again about controlling broadleaf weeds in the yard. Dandelion and other broadleaf weeds are easily controlled with post emergence herbicides such as those that contain a Trimec solution or other combination formulas. Remember to spray early in the day when winds are low and before temperatures begin to get too warm. Care should be used when applying these herbicides around desirable landscape plants. Do not over apply especially around tree and shrub roots. Spot spray when possible as it is not necessary to do a blanket cover spray when only few weeds exist in the yard. Spraying young weeds as they first appear this fall will be more effective than waiting until the foliage is more mature. Mature foliage resists the herbicide more easily than the younger shoots. Always read and follow label directions!!

The End is Nigh. Post-harvest Vineyard Checklist.

Andrej Svyantek, Assistant Extension Specialist, Viticulture and Enology

Just because the grapes are off the vine does not mean grape growers get to take any time off. Most of the Oklahoma grape crop was harvested in August and September this year. With fruit crushed and pressed in the tanks, well on its way to becoming wine, it is easy to forget about the

field and focus on fermentation. However, a few simple post-harvest checks (Table 1) will help maintain vineyard productivity and improve the yield and quality of future harvests.

Table 1. Post-harvest vineyard checklist for Oklahoma grape growers, 2021.

What	When	Complete
Count Count skips and sick	Fall 2021	<input type="radio"/>
Continue Maintain disease control	Until vineyard has completed leaf fall 2021	<input type="radio"/>
Clean Remove grow tubes	Late-Summer to early-Fall 2021	<input type="radio"/>
Clean irrigation system	Fall 2021	<input type="radio"/>
Clean and oil equipment	Fall-Winter 2021-2022	<input type="radio"/>
Clean and oil pruners	Winter 2021-2022	<input type="radio"/>
Sample Sample soil	Fall-Winter 2021-2022	<input type="radio"/>
Sample irrigation water	Fall-Winter 2021-2022	<input type="radio"/>
Sample buds	Pre-pruning spring 2022	<input type="radio"/>
Plan Order chemicals	Winter 2021-2022	<input type="radio"/>
Order vines	Fall-Winter 2021 for 2022 planting	<input type="radio"/>
Plant cover crops	Fall 2021 for ~2023 vineyards	<input type="radio"/>
Plan trellis repair	Fall-Winter 2021	<input type="radio"/>
Consider the Vintage	Winter 2021	<input type="radio"/>
Plan for 2022 labor	Winter 2021	<input type="radio"/>
Don't Don't apply nitrogen fertilizers	Fall-Winter 2021	<input type="radio"/>
Don't conduct "fall" pruning	Fall-Winter 2021	<input type="radio"/>
Don't forget about your vineyard	The Rest of Your Life	<input type="radio"/>

Count

Count skips and sick – counting the dead (skip) and ailing (sick) vines enables growers to identify replant vine needs for ordering. It also helps growers to alter cultivar decisions as they identify issues with the site-cultivar combination due to environmental (frost, freeze, or moisture) or disease (bacterial, fungal, or other) obstacles.

Continue

Maintain disease control – disease control is critical for keeping vines healthy for future harvests, a vine left to diseases after harvest (Fig. 1) may have reduced crop or cold-hardiness in future years due to increased disease inoculum and stress.



Figure 1. Post-harvest 'Chambourcin' vine with powdery mildew infection.

Clean

Remove grow tubes – grow tubes on young vines are for herbicide shelter only, they do not provide winter protection.

Clean irrigation system – in irrigated settings, flush and clean pipes to preserve the longevity of their operation and that of the emitters.

Clean and oil equipment – before putting the tractor away from winter, consider cleaning and oiling it, otherwise spring will have just another task to complete with less and less time to do it in.

Clean and oil pruners – clean, sharpen, and oil your pruners during pruning, during the growing season, after Halloween, on Thanksgiving, during the Super Bowl. Clean, sharpen, and oil your pruners often if you care about your hands or your vines. A clean pruning cut heals well, a ragged pruning cut hurts your vines and your wrists.

Sample

Sample soil – submit samples to a local lab to identify deficiencies in fields before planting or in actively producing vineyards.

Sample irrigation water – keep an eye on irrigation water status if your vineyard relies on irrigation, vines are generally drought tolerant but certain cultivars and/or rootstocks struggle with poor quality water.

Sample buds – sample buds before pruning starts in the spring to make pruning adjustments based on winter loss.

Plan

Order chemicals – do not wait to buy herbicides, insecticides, or fungicides until after you need them, they might be sold out.

Order vines – vines sell out quickly during winter, consider planning two seasons ahead to be able to plant exactly the right cultivar you want at your site.

Plant cover crops – when amending future vineyard plots, consider planting cool-season cover crops to maintain soil integrity.

Plan trellis repair – identify any end-posts needing replacement, trellis arms needing repair, or just budget for future trellis establishment.

Consider the Vintage – write down your yield (ton/acre), fruit composition (Brix, pH, TA), and seasonal issues. What can you do to improve the 2022 vintage as it pertains to crop harvested, quality of that crop, and health of the vines?

Plan for 2022 labor- planting, training, taping, pruning, shoot-positioning, shoot-combing, leaf pulling, spraying, pre-harvest sampling, harvesting, crushing, destemming, and pressing are all tasks that do not magically happen by themselves. Consider your vineyard's labor demands and whether it warrants bringing in additional help. Plan and budget for success, not stress.

Don't

Don't apply nitrogen fertilizers – avoid fall nitrogen applications that might stimulate growth.

Don't conduct "fall" pruning – do not cut back vines before or after harvest, this can force dormant buds to push which may stress the vine and sacrifices potential future crop.

Don't forget about your vineyard – by planting a vineyard, growers make a commitment to their vines. At planting, the farmer whispers “'til death do us part” to each ‘Chambourcin’, ‘Norton’,

and ‘Rubaiyat’ vine as it is placed in the ground. When a vineyard is neglected from the mind of a grower, even during the winter off-season, it pushes the grapevines towards the finish line of death. By keeping the vines in mind, you can plan for obstacles while they remain minor nuisances. When you forget about your vineyard, these nuisances can grow into catastrophes.

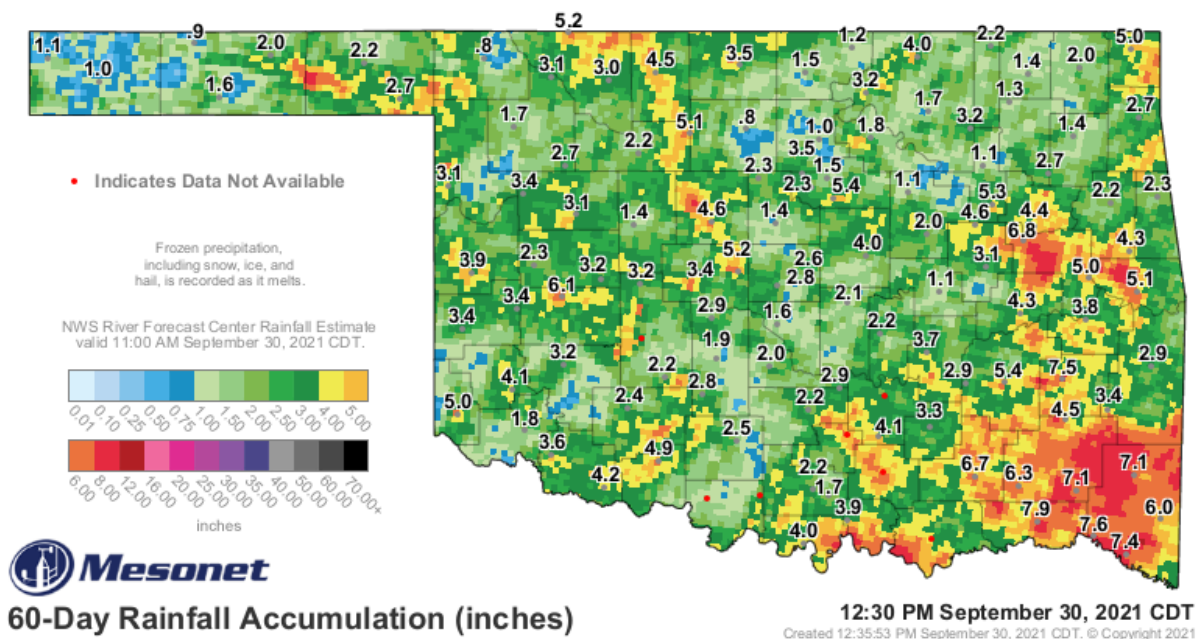
Final Push for Pecan Crop

Becky Carroll

Last spring’s late April freeze not only reduced the pecan crop in many low-lying areas, but also affected other nut producing forest trees. With little to no acorn crop in many areas, wildlife pressure will likely be rough this season. Stay after the crows, squirrels, and other critters to preserve as much of the crop as possible. Squirrel traps, harassment, and hunting will be needed to protect the crop. Be sure to follow wildlife regulations to control depredation legally. Go to www.wildlifedepartment.com to find the local game warden to secure depredation permits.

Harvesting early will also be helpful to eliminate loss to wildlife but many of our growers are reporting ripening about 10-14 days later than normal this season. This may be due to the late freeze and a secondary crop on some trees.

Lack of water may prove to have some affect on the quality and opening of shucks this season. Hopefully this last-minute rainfall will be widespread and help with late season kernel fill and shuck opening. During nut fill in August and September, two inches of rainfall or irrigation per week is essential for best kernel quality on large-fruited cultivars. Drought conditions also cause shucks to be “stick-tights”. They need water to complete the opening process. Yellowing of leaves and leaf drop is also being reported in areas with very dry conditions.



Preparing Soil for Spring Gardens

Lynn Brandenberger, Extension Specialist

Most of us have probably heard the old adage that the early bird gets the worm, but have you ever considered how starting soil prep in the fall for your spring and summer garden might pay big dividends? As mentioned in an earlier article, fall is a good time to take stock in what has occurred during the summer and it is also a great time to add organic matter in some form to the soil.

There are several ways to add organic matter. If you have a good source of manure then adding it in the fall for a spring garden will allow time for mother nature to break down any pathogens (pathogenic bacteria, etc.) that might cause food safety concerns. After adding manure go ahead and till it into the soil so it will have time to begin breakdown and release of its plant nutrients in the soil.

After applying manure we have an opportunity to plant a winter cover crop. I would recommend either purchasing a commercially blended cover crop seed mix or use winter wheat (cereal grass) along with one or more winter legumes. Cereal grasses are great at producing organic matter that takes a little longer to break down making them good for building up the organic matter in your soil. Add to this some winter legumes and you're ready to go.

Winter legumes along with their corresponding bacterial partners (rhizobacterium) have the capability to capture nitrogen in the air and "fix" it in the plant. In the spring, once the legume is tilled into the soil, nitrogen is released slowly for your crop plants to use. How much nitrogen? Most soil scientists would estimate somewhere between 50-100 lbs. of nitrogen per acre (roughly a tenth to nearly one quarter of a pound per 100 square feet).

You can purchase pre-inoculated legume seed which makes it very simple or you can inoculate it yourself with the proper rhizobacterium. Here is a short video on how to inoculate small amounts of seed: <https://www.youtube.com/watch?v=GP8oS5EdPMQ>.

Regarding which winter legumes to use in Oklahoma, crimson clover is a favorite because it not only provides nitrogen but it is beautiful during its spring bloom. We've also used Austrian winter pea and it is amazing to see it climb up the cereal grain that it is planted with to show off its pastel pea-like flowers. I'm certain there are others, but those are two of my favorites.

Since you likely tilled up the garden or field to incorporate the manure, you can broadcast the cover crop seed by hand or with a broadcast fertilizer spreader. A light raking will provide good seed to soil contact. If you can time all of this to coincide with a rain soon after seeding, it should begin to emerge quickly. If the weather is dry, then you may want to consider overhead watering to get germination started.

Cover Crops

David Hillock

Cover, or green manure, crops are usually grown when the garden soil is idle but are also sometimes planted between rows of fruits or vegetables to serve as a living mulch.

Cover crops are sometimes called "catch crops." Their deep roots absorb nutrients from the soil that could otherwise leach away or are unavailable to garden crops with shorter roots. When tilled under, cover crops decompose and release those "caught" nutrients.

Some cover crops, those from the legume family, even trap and transform atmospheric nitrogen in their roots. This nitrogen serves as a fertilizer source for future crops.

Cover crops in the grass or grain family don't actively fix nitrogen but usually create a thick mulch, produce a large amount of organic matter to be tilled under, and have deep roots that loosen compacted soils, thereby improving drainage and aeration.

Cover crops are divided into two categories: warm-season and cool-season, based on the optimum times to plant and grow.

Warm-season types will not tolerate freezing temperatures and should be planted after all danger of frost. Most take six to eight weeks (or longer) to grow large enough to turn under. An exception is buckwheat, which may need only four weeks under good growing conditions.

Cool-season cover crops will survive through the winter. They are planted in the fall, from mid-September until the end of October, and left over the winter to provide protection from soil erosion. They need to be planted early enough so their roots develop before winter but late enough, so they do not complete their growing cycle (and die) before the weather gets cold.

Because they are used in rotation with other crops in the same garden location, cover crops can help suppress harmful soil nematodes. Nematodes, which are parasites, tend to be host specific, attacking just one crop or crop family. They do not "like the taste" of other plant families and their numbers will decline without the preferred food source.

Some cover crops, just like any other crop, may attract insects that could harm other garden crops. Gardeners should watch for pest insects in cover crops and other crops and be ready to use various IPM or best management methods while the pest problem is in its early stages.

Legumes need certain strains of bacteria to enable them to convert nitrogen gas from the air into a form that plants can use. The bacteria needed by various kinds of legumes may or may not already be in your garden soil. To be certain, legume seeds should be coated with an inoculant powder that contains living *Rhizobium* spores. Commercial inoculant is usually inexpensive and widely available. Some legume seeds are sold pretreated with the proper bacteria.

Cover Crop Planting Guidelines

- Prepare the soil as you would if planting vegetables. Legumes will produce the nitrogen they need, but non-legume crops will need to have nitrogen fertilizer (1 to 1-1/2 pounds of actual nitrogen per 1000 square feet) added to the soil to produce maximum yields of organic matter.
- Inoculate legume seeds by moistening them, draining the excess water, adding the inoculant powder, and mixing well.
- Broadcast the seed evenly.
- Cover seed with a thin layer of soil by raking it in or going over the area with a rototiller set very shallow.
- Keep the area moist until seedlings emerge. Light watering may be needed twice a day, or more, in hot weather.
- Mow and harvest cover crops before they flower and produce seeds and till under at least 10 days to 2 weeks before planting garden crops.

Below is a list of cool-season cover crops. For more information about these species and the warm-season species see OSU fact sheet [HLA-6436](#) – Earth Kind Gardening Series: Healthy Garden Soils.

Hairy Vetch (*Vicia villosa*)
Austrian Winter Peas (*Pisum sativum* variety *arvense*)
Winter Rye (*Secale cereale*)
Winter Wheat (*Triticum* species)
Crimson Clover (*Trifolium incarnatum*)
Red Clover (*Trifolium pratense*)
White Clover (*Trifolium repens*)
Yellow-Blossom Sweet Clover (*Melilotus officinalis*)
Arrowleaf Clover (*Trifolium vesiculosum*)
Ball Clover (*Trifolium nigrescens*)
Birdsfoot Trefoil (*Lotus corniculata*)
Fava Bean (*Vicia faba*)
Garden Pea (*Pisum sativum* varieties)
Barley (*Hordeum vulgare*)
Ryegrass (*Lolium* species)
Purple Vetch (*Vicia benghalensis*)
Common/White Vetch (*Vicia sativa*)
Alfalfa (*Medicago sativa*)
Oats (*Avena sativa*)