

# Horticulture Tips

## November 2021

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

### **GARDEN TIPS FOR NOVEMBER!**

*David Hillock, Consumer Horticulturist*

#### Lawn & Turf

- Fertilize cool-season grasses like fescue with 1 pound nitrogen per 1000 sq. ft.
- Continue to mow fescue as needed at 2 inches and water during dry conditions.
- Control broadleaf winter weeds like dandelions ([HLA-6601](#)).
- Keep falling leaves off fescue to avoid damage to the foliage.

#### Tree & Shrub

- Prune deciduous trees if in early part of winter. Prune only for structural and safety purposes.
- Wrap young, thin-barked trees with a commercial protective material to prevent winter sunscald.
- Apply dormant oil for scale infested trees and shrubs before temperatures fall below 40 degrees Fahrenheit. Follow label directions.
- Continue to plant balled & burlap and containerized trees.
- Watch for arborvitae aphids, which tolerate cooler temperatures in evergreen shrubs.

#### Flowers

- Tulips can still be successfully planted through the middle of November.
- Leave foliage on asparagus, mums, and other perennials to help insulate crowns from harsh winter conditions.
- Bulbs like hyacinth, narcissus and tulip can be potted in containers for indoor forcing.

#### Miscellaneous

- Leftover garden seeds can be stored in an airtight container in the refrigerator or freezer until next planting season. Discard seeds over 3 years old.
- Gather and shred leaves. Add to compost, use as mulch or till into garden plots.
- Clean and store garden and landscape tools. Coat with a light application of oil to prevent rusting. Drain fuel tanks, irrigation lines, and hoses. Bring hoses indoors.

#### Fruits & Nuts

- Delay pruning fruit trees until next February or March before bud break.
- Harvest pecans and walnuts immediately to eliminate deterioration of the kernel.

## **Pecan Topics for November**

*Becky Carroll, Associate Extension Specialist, Fruit and Pecans*



November 5 will be the final webinar for 2021 to discuss timely pecan topics. The webinar begins at 1 p.m. Pecan Topics for November is open to anyone with an interest in pecans - homeowners, hobbyists, and commercial growers. In-service credit is available to extension personnel.

November topics on the agenda include how to thin native pecan groves, grading pecans, and how does 2021 harvest look now that it's started?

Register in advance for this meeting:

<https://dasnr.zoom.us/meeting/register/tJ0pce6orzIjH9HSdvFg22K6SrjB62iKV6J9>

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](mailto:becky.carroll@okstate.edu).

## **Fall Cleanup**

*David Hillock*

As plants in the landscape go dormant or are killed off by colder temperatures, it is a good time to do some fall cleaning in the landscape.

Leaves falling from trees are a good source of mulch and compost. In wooded areas where there is little understory growth it is best to leave the leaves to decay naturally. If there are

groundcovers or turfgrasses growing in the area then it is best to remove the leaves and compost them or use them as mulch.

Most landscape debris can be chipped or ground up to be used in compost piles or as mulch. However, if plants have been plagued with diseases and insects it may be best to remove them completely from the garden by burning them (if allowed in your community) or sending them off to collection facilities. Debris infected with diseases or insects remaining in the landscape will only become a source for infection next year.

Sanitation is an important step in reducing outbreaks of pest problems. A good example is the twigs that frequently fall from trees like pecan. It is very possible they are infected with the larvae of a twig girdler. Larvae overwinter in the dead twigs, eventually pupating in the twig and emerging as an adult next summer. Another good example is the numerous foliar diseases that also overwinter on dead leaves and debris only to spread to new growth the following spring. Removing these organisms from your garden will reduce the chances of them recurring the following year.

Another practice during the fall and winter months that helps keep pests at bay is occasionally tilling fallow ground. Flower or vegetable beds that remain empty during the winter months can be tilled just before freezing temperatures. Hibernating insects are brought to the surface where they will be exposed to and killed by the cold temperatures.

## **A Eulogy for Wine Quality: Ullage in Commercial and Home Winemaking**

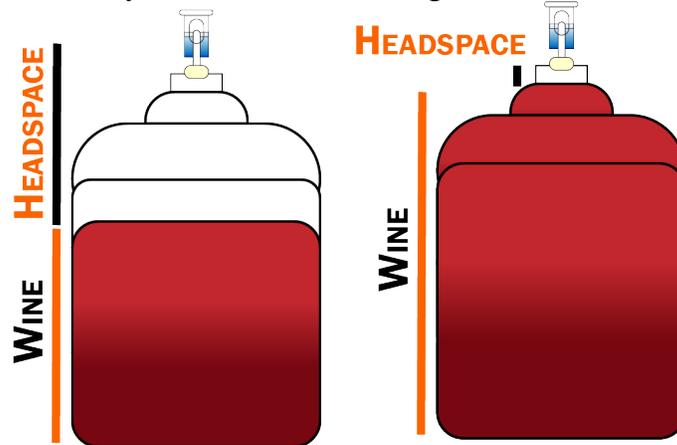
*Andrej Svyantek, Assistant Extension Specialist, Viticulture and Enology*

I like oxygen; I try to take a moment to breathe it in almost every day. It seems almost crucial to my life. Yet, in winemaking, oxygen is a killer.

Oxygen kills the aromatic character, color, flavor, and shelf-life of fermented ethanol products. There are many ways gasses can integrate into the wine leading to increased levels of the dreaded DO (dissolved oxygen); two common ways for oxygen ingress are through splashing during racking and air bubbles forced into the wine through a poorly set-up pump. One of the more passive ways oxygen can come in contact to ruin a wine is through improper tank fill levels. This leads us to the word of the day, *ullage*. Ullage (pronounced “uh luhj”) refers to the headspace (Fig. 1) in a vessel containing a fluid; in wine this is the gas portion of a filled fermenter or wine bottle.

If your long-term storage containers have excessive ullage, you can start writing a eulogy for your wines, ciders, meads, and beers. As they pick up oxygen, they will rapidly age and deteriorate until they no longer resemble the flavorful, fruit forward samples you tasted and were excited about shortly after fermentation. When we do not fill our tanks to capacity, we are more than alleged co-conspirators with ullage in the death of our wines.

**Figure 1.** Headspace, aka ullage, depicted in cartoon carboys. On left is an insufficiently filled carboy; wine stored like this is prone to oxidation. On the right is a carboy filled near to capacity; filling the volume of the carboy with wine rather than gas reduces the risks of oxygen exposure.



### **Reducing Ullage Risks**

*The Purge-* Purging headspace with inert gasses (argon, nitrogen, or carbon-dioxide) is one practical, short-term solution to reduce oxidation risks. We frequently have extra headspace during fermentation, but this is filled with CO<sub>2</sub> as a by-product of the yeasts' fermentative activity. After fermentation is complete, it is up to us to protect our wines. When racking from one vessel to another, always consider first purging the vessel with argon. Because argon is heavier than air it can form a protective "blanket". Purging vessels must be a common practice for wine health, but it is not a long-term solution for holding wines in an underfilled container.

*Heads-Up-* Topping up, filling the vessel to capacity with additional wine is the best choice for maintaining your product. To this end, small lots of wine may be set aside for sacrificial top-ups throughout the bulk aging process.

*Variable Capacity-* Variable capacity wine tanks give the fermentation vessel a flexible volume. This means even if you have a 1000 L tank and only 500 L of wine, you can reduce the capacity of the tank by adjusting the lid, thus matching your vessel's volume to your product. Variable capacity wine tanks require maintenance, a poorly sealed gasket may leave the wine exposed to oxidation or microbes; however, when sealed correctly they increase the flexibility in vessel decision making post-harvest.

*Downsizing-* Dispersal of bulk wine into multiple tanks is a practical method to prevent oxidation risks associated with headspace. For a small-scale home winemaker, this may be easily done by splitting the wine of an incompletely filled 3, 5, or 7-gallon carboy into multiple 1-gallon vessels.

### **Just Because Your Vessel is at Capacity, Do Not Forget These Four Things**

*Check Airlocks-* Empty airlocks and loose bungs do no good; if not properly employed, there is nothing between your wine and the oxygen and microbe rich air that we breath. Airlocks need to be checked about once every two weeks, especially as temperatures shift. Check that fluid is up

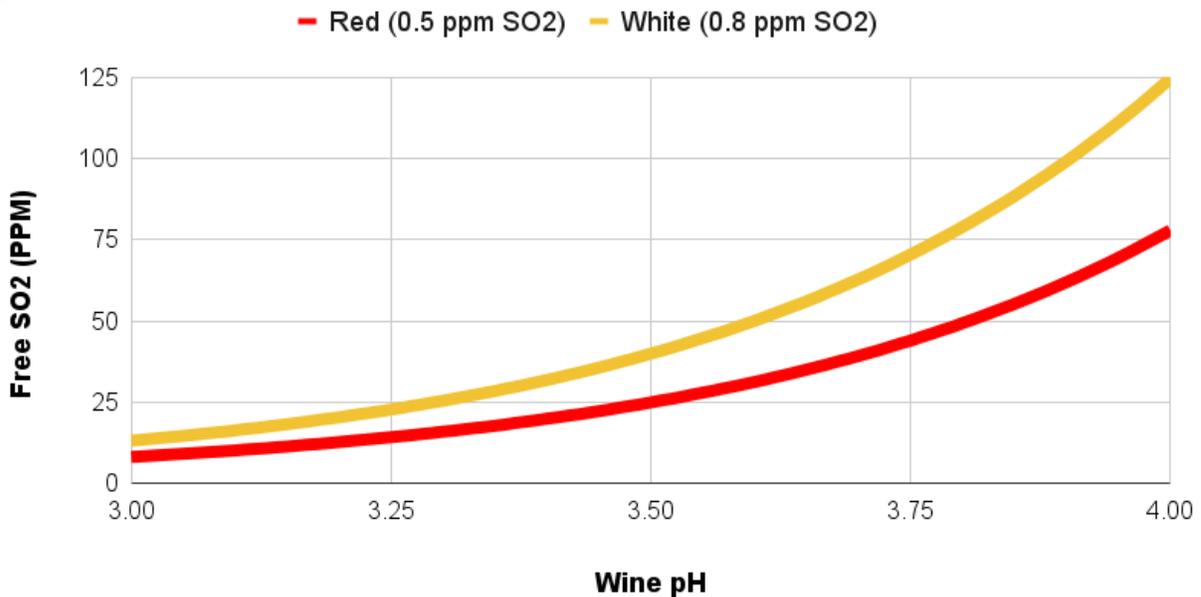
to the fill line and there is no sign of backwash or microbial growth within the airlock. If backwash or growth is present, promptly perform “surgery”, replacing the old airlock with a new, freshly sanitized airlock to protect your wine.

*Maintain SO<sub>2</sub>*- Whether you are planning for vacation, a family visit, or a big project in the vineyard- about once a month, when you check your calendar, so too should you check your SO<sub>2</sub>. Sulfur (added as potassium metabisulfite) is utilized as a preservative in winemaking. If your SO<sub>2</sub> starts to disappear, you may be losing its protective properties. General recommendations are for 0.5 to 0.8 mg/L (ppm) of molecular SO<sub>2</sub>. How much potassium metabisulfite is required is dependent on wine style, health, and most importantly...pH (Fig. 2).

*Monitor pH*- Check your pH early and often. Changes in pH can be indicative of larger processes on-going in the wine as it ages, and without knowledge of a wine’s pH, proper SO<sub>2</sub> additions cannot be calculated

*No Splashing*- You did it! You harvested, crushed, destemmed, and fermented the perfect grapes! No one has tasted anything better than your hyper-local, red-dirt terroir expression of backyard bold, Oklahoma hybrid wine! You kept it in an appropriate size fermenter, monitored your pH and SO<sub>2</sub>. You embraced its character with oak spirals, grippy tannins, and a touch of residual sugar. Now it is time to bottle your masterpiece. Whether you are racking or bottling- no splashing is allowed, oxygen ingress at any stage can spoil your enological efforts.

**Figure 2.** Free sulfur dioxide required to achieve 0.5 or 0.8 ppm of molecular SO<sub>2</sub> based on wine pH.



### Final Reminder

Excessive ullage is a common, expensive, and avoidable mistake leading to passive degradation of wine lots held in improperly filled fermenters. If we leave our wine unprotected against

oxidation, then we might as well push our carboys off a ledge because our product is as good as dead.

## **Protecting Young Trees**

*David Hillock*

Trunks of some newly planted trees, especially those with green trunks or smooth, thin bark, require protection from direct sunlight during all seasons. They are especially susceptible to sunscald (blistering and cracking of the bark) during winter months when leaves are absent.

Protect the trunk with a commercial tree wrap such as a polyurethane spiral wrap or paper (kraft) wrap. The wrap should be applied in the fall but should be removed prior to trunk expansion each spring. Some species that will benefit most from tree wraps include ash, birches, crabapples, honeylocust, maples, young fruit trees, and redbuds.

The most reported damage from trunk protective wraps is trunk girdling or constriction because the wrap was too tight or left on too long. Generally, a tree will only need to be wrapped the first season or two after planting. Tie the wrap firmly, but not tightly. Polyurethane wraps expand without binding the trunk. Start at the ground and wrap up to the first branch slightly overlapping as you go. Do not attach wraps with wire, nylon rope, plastic ties, or electrical tape.

Plants prone to winter desiccation, such as broadleaf evergreens, when planted in open windy areas may require additional protection. Temporary protective barriers such as sheets of burlap, lathe fencing, bales of hay etc. can be constructed to provide protection from the drying winds. Unfortunately, antidesiccants generally do not relieve plant stress in Oklahoma in winter or summer.

Protect young trees and shrubs from animal damage. Polyurethane wrap, wire mesh collars or rodent repellent paint can be used. Holly, honeylocust, elm, and fruit trees are particularly susceptible. Remember snow will change the height of the bite.

For more information on protecting landscape plants during the winter see OSU fact sheet [HLA-6404](#) "Winter Protection of Landscape Plants."

## **Oklahoma State Pecan Show**

*Becky Carroll*

It's that time of year again! Remember to save back a couple of pounds of your best pecans to enter in the 2021 state pecan show this year. Oklahoma's crop may be limited in some areas due to early freeze events, but with smaller crop loads, quality may be even better! Collect some of your best pecans to send in to represent your farm in the 2021 State Pecan Show.

If no county/area show is available, growers may enter pecans directly by sending samples to:  
*Cimarron Valley Research Station*  
*Attn: Becky Carroll*  
*10820 South Jardot*  
*Perkins, OK 74059*

**Samples should arrive by January 28, 2022.**

Samples should be entered in a **sealed** plastic or paper bag. Label the bag on the outside and place a label inside the bag. Information should include exhibitors name and address, county, and type of pecan entered. Be sure to follow the guidelines that are listed below before sending entries.

**A few helpful hints:** Take the time to select pecans that are all the same cultivar, or same size and shape natives – *don't send mixed pecans*. Select uniform, clean, uncracked pecans. Presentation can make the difference between two very similar samples. Make sure to send two pounds of pecans in a labeled and sealed bag.

### **General Rules and Guidelines**

- All entries must be grown in Oklahoma during the current season.
- Each entry shall consist of two pounds of nuts.
- Entries deemed unworthy by the judges will not compete for awards.
- Label each entry as to exhibitor's name, address and cultivar of nuts. If more than one native (seedling) pecan exhibit is made, identify the nuts from separate trees by numbers. Only one exhibit of each cultivar or native tree may be entered by one individual.
- Each entry will compete in one of the following 26 classes:
  1. Barton
  2. Burkett
  3. Cheyenne
  4. Choctaw
  5. Comanche
  6. Gratex
  7. Kanza
  8. Kiowa
  9. Lakota
  10. Maramec
  11. Mohawk
  12. Nacono
  13. Oconee

14. Pawnee
15. Peruche
16. Podsednik
17. Schley (eastern)
18. Shoshoni
19. Squirrels Delight
20. Stuart
21. Waco
22. Western
23. Wichita
24. Other Cultivars
25. Large-Native (seedling) 60 nuts/lb or larger
26. Small-Native (seedling) more than 60 nuts/lb

- Each grower is allowed to participate at one county show of his or her choice.
- Each grower is allowed to enter one entry in each show class with the exception of Class 24 (Other Cultivars), Class 25 (Large-seedling) and Class 26 (Small- seedling)
- Each grower may enter one entry from each native (seedling) tree.
- Entries should be shipped or mailed to arrive at the show at least one day prior to the deadline.
- County pecan shows will not be affected by these rules and procedures.
- Samples will be placed in cold storage and judged prior to the Oklahoma Pecan Growers Annual Meeting. At that time, the winning entries will be displayed with awards and recognitions. All entries will become the property of the OPGA.
- First, second, and third place winners in each class at the State Pecan Show will receive ribbons.
- State Pecan Show Special Awards – Plaques will be awarded for the largest pecan entry, the entry having the highest kernel percentage, the champion native and the best entry of the show. The plaques are presented at the Awards Banquet during the annual meeting.
- If a qualifying show is not available, growers may submit entries in accordance with these guidelines directly to the State Show. Entries in the state show must be received by January 28, 2022.

## **Forcing Bulbs for the Holidays**

*David Hillock*

We have been busy planting bulbs in the gardens, but we do not have to wait until spring to enjoy these blossoms. Many spring-flowering bulbs can be forced indoors for a colorful winter display. What better way to brighten up a winter day than with fresh flowers?

"Forcing" is the term used to describe the process that stimulates bulbs to bloom out of season. The easiest bulbs to force are Paperwhite Narcissus because they don't require chilling. Other commonly forced bulbs include amaryllis, muscari and hyacinths. More challenging bulbs for forcing include colchicum and miniature iris. When selecting bulbs for forcing look for varieties that are specifically recommended for this purpose. Most bulbs require a chilling period or period of cold temperatures before they will bloom, but bulbs sold specifically for indoor forcing are pre-chilled, removing this step for the gardener.

Paperwhites are quick and easy to start and will bloom within four to six weeks. Start by selecting a container without any drainage holes. A clear glass vase can be used so you can see the roots of the bulbs growing, but many different types of containers can be used, if it is deep enough to hold about 3 inches of media.

When forcing bulbs, it is not necessary to use soil as the medium, though you may. It may be easier to use washed pea gravel or glass pebbles that can be purchased at craft stores. The stones or gravel will hold the bulbs in place as they grow. Fill the container with about 2 inches of growing medium. Then, place the paperwhite or other bulbs on top of the pebbles. For a nice display, set 7 or more bulbs close together so they almost touch. A large bunch of bulbs will be more dramatic. Set the bulbs so they are perfectly upright. Wiggle the bulbs down into the pebbles a little bit and then fill in around the bulbs with more pebbles. You do not want to completely bury the bulbs, instead, leave 1/2 to 1/3 of the bulb exposed.

Once you have the bulbs in place, add just enough water to the container to reach the base of the bulbs, but not touch the bulbs. Do not let the bulbs sit in water or they may rot. One of the reasons to use a glass container is that it is easy to see the level of the water. If you are using a solid container, just dig a small hole next to a bulb so you can see the water depth.

To start the rooting process, place your container in a cool room that gets low light or no light, such as a windowless room. Keep your container at low light levels until the roots begin to grow well and the shoots start showing - usually about 1-2 weeks. Keep an eye on the water level and refill as necessary to keep the level just below the bottom of the bulbs.

Once you have good root growth, move your bulbs into a warmer bright, sunny window and watch them grow! Once the bulbs begin to flower, move them out of direct sun so your blooms will last longer. Your home will be filled with beautiful flowers and the refreshing aroma of spring in the middle of winter. Plant batch after batch to keep flowers blooming all winter long. Paperwhite containers make beautiful centerpieces for the table during the holidays and are also great to give as holiday bouquets. Or force paperwhites with your children to create unique gifts for their teachers or grandparents.

## **Protecting Spring Bulbs from Squirrels and other Critters**

*David Hillock*

If you haven't planted your spring flowering bulbs yet and have had problems in the past with critters destroying your plants, here are a few suggestions to protect them this winter.

Squirrels and rodents cannot resist digging their teeth into the juicy bulbs we so conveniently place in the ground for them each fall. Though our intention is not to feed wildlife, this can be the ultimate fate of many flower bulbs. An easy trick can help protect bulbs over the winter to ensure abundant spring blooms. The tool of choice is hardware cloth with ½ inch openings.

To make use of this trick, dig out a small planting bed, rather than plant each bulb individually. Remember that proper planting depth is important. The general rule is to plant bulbs at a depth equal to 3 times their height. Your mulch layer should be included in the final depth of your bulbs.

Dig a bed a few inches wider on all sides than the intended bulb planting and set the bulbs. Remember to place them with the growing tip pointing up. Once all the bulbs are set, begin filling the bed with soil until the bulbs are covered, but do not completely fill the planting bed.

Stop adding soil an inch or two below grade. Place the hardware cloth over the planting area, securing the edges in the soil with stakes. Finish filling the planting area with soil and mulch. The wire will prevent animals from digging up your bulbs, but the openings are wide enough to allow the foliage and flower stalks of the bulbs to move freely through.

If your bulb problems are caused by burrowing rodents such as gophers, you may need to line the bottom of the area with hardware cloth too. Another trick is to construct small boxes or baskets out of hardware cloth and place the bulbs inside. Then plant the entire cage in the ground. This method is also useful if you are trying to squeeze bulbs in among perennials and don't have room to dig a larger planting bed.

Deer find tulips to be a delicacy; once tulips emerge in spring, keep new growth sprayed with repellents, or where feasible use a fence around the area. Fences need to be at least 8 feet high to keep deer out.

Critters do not find all bulbs to be delicious and even avoid some. Consider planting a less favored bulb in the landscape, such as daffodils, muscari, hyacinth, scilla or fritillaria.

## **Controlling Insects in and Around the Home**

*David Hillock*

The first important step in the process of insect control is to identify the insect that is present so that the proper control procedure will be used. OSU county extension educators and pesticide

dealers can help identify the pest for the homeowner, or the pest may be sent to the OSU Entomology Department for identification.

Sanitation and good housekeeping are possibly the most important aspects in controlling or preventing pests, but even well-kept homes sometimes become infested. The homeowner can usually control light infestations of pests in the house by carefully following directions on the pesticide container and by doing a thorough job of application.

Certain pests found outside may be eliminated before they enter the home. (For information on control of pests outdoors, refer to OSU Extension Fact Sheet [EPP-7306](#)). However, some insects live entirely within the home, where they must be controlled by applying spray, dust, bait or aerosol pesticides to areas where they are most frequently found. If the infestation is severe and widespread, it is advisable to employ the services of a pest control firm, which has pesticides and application equipment not generally available to homeowners.

For more information on pesticides and their use in and around the home see [EPP-7312 Household Pest Control](#).

### **Safety Tips**

- Read and follow all directions on the container label.
- Avoid repeated or prolonged contact of insecticides with the skin and prolonged inhalation of spray mist.
- Do not spray oil solutions near an open flame (pilot lights).
- Do not risk contaminating food by treating near food, dishes or cooking and eating utensils.
- Dispose of empty pesticide containers, and do not puncture or incinerate aerosol or pressurized spray cans.
- Store insecticides in the labeled original containers, in a dry place where they cannot contaminate foodstuffs and where children and pets do not have access to them.
- After using pesticides, always wash your hands and face and any other exposed body areas.
- For further information on handling, mixing, and applying pesticides, consult your area or state extension entomologists, visit your local county extension educator, and/or refer to OSU Extension Fact Sheet [EPP-7450](#) for information on safe use of pesticides.

### **Prevention and Control Hints**

Before applying insecticides for pest control, the homeowner can help ensure better control by doing the following:

1. Clean out areas that make good homes for the pest.
2. Clean up areas that collect grease, food scraps or other spillage which might provide a food source.
3. Eliminate excessive storage boxes from the attic and garage and clean up foliage or other hiding places from around the outside foundation of the house.
4. Seal up cracks and crevices around the home to keep insects looking for a place to hibernate over the winter from entering the home.

5. If grain or flour pests are present, locate the infested material. Go through all cereal boxes, flour, beans, dry pet food, and spice containers until the infestation source is located. Dispose of the infested material, then a light application of pesticide.
6. Carefully check newly purchased dried foods for insect infestations, and store foods in tightly sealed glass, plastic or metal containers rather than in sacks, bags or boxes.

**NOTE on ultrasonic electronic or sound control devices: To date, these devices have not been proven to be effective or practical.**