

# Horticulture Tips

## November 2008

Oklahoma Cooperative Extension Service  
Division of Agricultural Sciences and Natural Resources  
Oklahoma State University

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

*David Hillock*

#### Lawn & Turf

- Fertilize cool-season grasses like fescue with 1 lb. nitrogen per 1,000 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 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°F. Follow label directions.
- Continue to plant balled and burlapped 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.

### **Fall Lawn Watering Tips**

*Justin Moss, Turf Extension/Research*

With the busy holiday season upon us, now is the time to remember about proper lawn care over the fall and winter. Fall lawn care will vary by grass species, but a few major tips may be helpful to ensure a nice, healthy lawn next spring.

If you have not conducted a soil test in some time, now is a good time to measure the soil pH and nutrient availability. Contact your local extension educator or the Oklahoma State University (OSU) Soil, Water, and Forage Analytical Lab (405-744-6630) for proper sampling procedures. With this information, you will be prepared to fertilize and/or amend the soil properly next spring. It is also a good idea to test your irrigation water quality which can also be completed with help from you local extension educator or the OSU Soil, Water, and Forage Lab. Soil and water recommendations will be available with your test results.

Another major issue is fall lawn watering. Inadequate precipitation and/or irrigation during the fall and winter months can contribute to turfgrass winter kill. Warm-season turfgrasses such as bermudagrass will go dormant over the winter months, but still need adequate moisture to maintain plant health. Cool-season grasses such as tall fescue also need adequate moisture during the winter months to sustain life. In general, you may need to adequately irrigate your lawn every 10-14 days during dry periods. This can sometimes be difficult due to freezing temperatures during the days or nights. Ideally, irrigate your lawn in the morning on a relatively warm day when temperatures are expected to stay above freezing. In addition, remember to remove and store your water hoses and sprinklers between fall and winter irrigation events.

Following these fall lawn tips will help to ensure a healthy, green lawn next spring.

## **Fall Freezes Cause Damage Too**

*Eric T. Stafne*

Although fall freezes can damage nearly any plant, I will focus on grapes for this article. Most growers are concerned about the cold temperatures in the middle of winter (as they should be), the temperatures that reach below 0°F in mid-winter (late December through February). Of course this is an extremely important time period for cold damage, especially in our wildly fluctuating continental climate. A lot of research has been done to show that the European species, *Vitis vinifera*, can usually withstand temperatures down to -8°F if the vine is fully acclimated and completely dormant. This is not a guarantee in our Oklahoma climate. In fact, I believe most years vines cannot achieve full dormancy because of the 70°F days followed by 10°F days. So, in mid-winter, 0°F is a more likely measuring stick for potential freeze damage.

Fall freezes may cause more damage than mid-winter freezes because vines are not fully acclimated to the cold temperatures. A prime example of this occurred in 2005, when in Stillwater we reached below 0°F during the first week of December. The first frost had only been in mid-November and thus vines only had about 3 weeks to get acclimated. Vines require cold (<32°F), but not excessively cold (<20°F), temperatures in order to acclimate and gain full dormancy. The December 2005 freeze caused significant damage and, in some cases, death of

grape vines. Hybrid and American grapes tended to survive this freeze event better because of their evolutionary adaptation to the continental climate of North America.

Even though not much can be done about the temperature fluctuations, vine management can potentially reduce the extent of the damage. The key is to reduce vine stress. Overcropping, poor water management, poor disease and insect control, and improper site selection can all lead to weaker vines that do not acclimate as well in the fall.

The moral of this story is that we need to be aware of very cold temperatures in the fall just as much as in mid-winter. These fall freezes can be more damaging than those that occur in mid-winter, and the best way to minimize damage is to keep vines as healthy as possible. Proper cultivar selection and site selection will also reduce the concern for significant damage.

## **Controlling Deer Damage**

*David Hillock*

Oklahoma's white-tailed deer (*Odocoileus virginianus*) population has increased from 40,000 to more than 250,000 since the 1960s. As the deer population expanded, deer moved into peripheral suburban areas. Increasingly, homeowners at the rural/urban interface must deal with damage to ornamental and garden plants. As deer begin moving into an area, homeowners initially enjoy seeing them and may actually encourage deer to come into their yard by feeding them. Rural subdivisions may ban hunting or place restrictions on firearm use to protect their deer or for safety reasons. Homeowner attitudes begin changing after deer numbers increase to the extent that shrubbery shows heavy browsing and gardens become difficult to grow because of continued depredation. In addition to browsing, damage may occur in the fall when bucks begin rubbing antlers on small trees or young nursery stock.

### **Commonly Used Control Methods**

The problem of damage control is not an easy one to solve. Trapping and moving excess deer is often suggested by homeowners as a humane alternative to hunting with guns or even limited hunting with archery tackle. However, the cost to move enough deer to lower damage to tolerable levels is definitely prohibitive. It should be recognized that most areas of Oklahoma are well populated with deer. Any deer moved to another area will only shorten food supplies for both resident and transplanted animals. Nature will then control the excess through starvation or decreased reproductive success because of chronic malnutrition. At best, trapping and relocating problem deer is only a short term solution.

Deer damage control methods fit into six categories:

- 1) exclusion—by electric fence or eight-foot high, deer-proof fence,
- 2) scare or frightening tactics—with tethered dogs, gas exploders, fireworks or discharging firearms,
- 3) habitat modification,
- 4) population reduction through sport hunting,
- 5) repellents—area repellents repel by smell and contact repellents repel by taste, and
- 6) alternative plantings.

Control methods other than an eight-foot high, deer-proof fence or an electric fence reduce damage by 50 to 75 percent at best, and often much less. A deer-proof fence does not fit well with most landscaping plans and can be expensive if large areas are to be protected. For small gardens, a deer-proof fence can be cost effective. For best results they should be constructed before serious damage occurs.

Scare tactics work for only short periods of time, but may be useful by providing enough protection to allow the crop to be harvested. Habitat modification is expensive and may actually attract deer if misapplied. A professional wildlife biologist should be consulted if this is the desired course of action. Population reduction by sport hunting is the most cost effective, long-term solution and should be seriously considered if damage is wide spread.

Repellents which provide an unpleasant taste or odor can be used, but damage will not be entirely eliminated. Effectiveness will vary with deer density, season, and availability of alternate foods. To be effective, repellents must be applied before deer begin actively browsing in the affected area. Area repellents are generally less effective than contact repellents. Research results on the relative effectiveness of area and contact repellents from several sources can be found in OSU fact sheet [HLA-6427 Ornamental and Garden Plants: Controlling Deer Damage](#). Bear in mind that repellents will not completely eliminate damage and that a given method's effectiveness will change seasonally, based on what natural foods are available to deer. Many repellents do not weather well and will need to be reapplied after a rain.

To see a list of plant material that may or may not be affected by deer or for more information on control see fact sheet [HLA-6427 Ornamental and Garden Plants: Controlling Deer Damage](#).

## **Twig Mania**

*David Hillock*

Some of you may have noticed an overabundance of dead twigs hanging in the tree or on the ground this time of year. Trees most commonly affected are pecan and elm among a few others. Many have been going crazy in the garden trying to keep them picked up so the gardens look nice and pristine, but as soon as you get them all picked up and turn around there are more on the ground.

If you look at the end of each twig it looks perfectly cut forming a cone with a jagged center. The culprit - the *Twig Girdler* - a longhorned beetle that chews through the bark, eventually laying eggs in the severed twig. The eggs hatch and the small larvae overwinter in the dead twig, eventually pupating and emerging as adults in August and September.

Damage may consist of reduced aesthetical quality of ornamentals and reduced production of nut bearing trees. To my knowledge a tree has never died from this pest.

Control is best achieved by collecting the fallen twigs and destroying them; this reduces the population for the following year. Insecticides may be necessary to control heavy infestations, applied in August and September when adults are active.



## **Lasagna Gardening**

*Shelley Mitchell*

Well, it's that time of year again--time to rake up tons and tons of leaves. Usually my husband and I rake leaves onto a tarp, drag the full tarp to the back of the yard, and dump the leaves over the fence into a compost area surrounded by wire panels. It is backbreaking work, and messy (especially when we dump the leaves over the fence on a windy day). This year we've decided to do something different. We're going to start a lasagna garden with all of our leaves.

'Lasagna' in this sense has nothing to do with what we will be growing in the garden. The term 'lasagna garden' refers to the layering process when the garden bed is made. Lasagna gardens are great, especially if you don't like using a shovel. Lasagna gardens are no-dig, no-till, and no-weed (well, to some extent).

Last weekend, we got 2' tall garden fencing and made a rectangle 12' x 13' (50 feet of fencing). We used wooden stakes at each corner to hold the fence up, and stapled the fence to the stakes. Next we took wet newspapers and covered the garden area, overlapping the papers and making sure that the paper layers were at least 5 sheets deep. The wet newspapers are crucial to a lasagna garden. They kill everything underneath, and the moisture keeps the newspaper in place and speeds decomposition. Earthworms love it.

After layering wet newspapers, we started filling in the fenced area with fallen leaves. We keep the leaves wet to hasten decomposition and keep them from blowing around. Since we are composting the leaves, we need to layer 'greens' and 'browns' to aid the decomposition process. Compost has four main ingredients: 1) greens, 2) browns, 3) water, and 4) air. 'Greens' are compost components high in nitrogen, such as fresh grass clippings, coffee grounds, manure, and

fruits and vegetables. 'Browns' are compost components high in carbon, such as hay, dead leaves, dried grass clippings, paper, and pine needles. Generally you want a compost mix of more browns than greens (30:1 by weight). So a lot of leaves ('browns') with a little horse manure ('greens') from a nearby barn should be just fine for great compost.

Over the next few months, if the compost pile is not heating up, we'll add more 'greens'. If we smell ammonia, we'll add more 'browns'. We'll keep the whole pile wet enough to provide the microorganisms moisture, but not so wet that conditions become anaerobic and kill the microbes. The heat generated by the microbes during composting should kill any weed seeds in the pile, and the newspapers will prevent the grass from growing through, so by spring we should have a nice pile of rich, relatively-weed-free compost that is mature enough to plant directly into---no digging involved!

## **Gypsum Improves Clay Soils - A Garden Myth**

*David Hillock*

It is a common gardening myth that adding gypsum to clay soils will help loosen the clay and make growing conditions better. However, there is no scientific basis or research to support the claim. One speculation on how this myth may have come about is that perhaps an enthusiastic homeowner heard that some gypsum would be a good source of sulfur (which it is) for plants. Since gypsum was only a few dollars a ton, the gardener probably purchased a pick-up load of the off-white colored material for the garden. After spreading it, the gardener would have found it necessary to till it in many times to get it thoroughly mixed and restore the soil to its original color. The gardener may have experienced the greatest crop in years and attributed this to the gypsum. More likely the garden benefited from the good deep tillage occasionally needed to break up hard pans or compacted layers of soil that form at the normal tillage depth. The high rate of gypsum served as a good marker, or indicator of when the job was done. Gypsum does have a place in the landscape as an amendment for correcting sodic or alkali soils, but does not really contribute to improving clay soils.

## **Epsom Salts**

*David Hillock*

With the growing trend to seek and use products that are deemed safe and natural, Epsom salts, a natural source of magnesium sulfate, is right at the top of the list. Unfortunately there are many unfounded claims that go along with some natural products. Claims that Epsom salts increase seed germination, improve uptake of other nutrients, and enhance growth and overall health are frequently made. Formulations are given that are supposedly "tried and true" for houseplants, vegetables, turf, shrubs and trees. Another claim is that Epsom salts are not persistent so you can't overuse them.

Epsom salts are frequently used to correct magnesium deficiency in intense cropping situations, but may or may not be the best choice in the landscape. Two primary causes of magnesium deficiency include a lack of magnesium in the soil or an imposed deficiency caused by mineral

imbalances in the soil or plant. Magnesium deficiencies tend to show up in light sandy soils, but will also occur in clay soils under intense production. Basically magnesium deficiencies can occur in any soil that is heavily leached due to high rainfall or irrigation. Excessive levels of potassium may also contribute to a mineral imbalance that causes magnesium deficiency in some species.

Dr. Linda Chalker-Scott, Associate Professor and Extension Urban Horticulturist at Washington State University, addresses the many claims by looking into the science and research behind the use of Epsom salts. You can read her conclusions by going to the following link

([http://www.puyallup.wsu.edu/~Linda%20Chalker-Scott/Horticultural%20Myths\\_files/Myths/Epsom%20salts.pdf](http://www.puyallup.wsu.edu/~Linda%20Chalker-Scott/Horticultural%20Myths_files/Myths/Epsom%20salts.pdf) ).

## **Oklahoma State Pecan Show 2008**

*Becky Carroll*

*Be sure to get the word out to everyone to enter their best pecans in the state show this year. There will not be any qualifying regional or district pecan shows this year. However, some county/area shows will be held at the discretion of the County Extension Educator. Growers are encouraged to participate in county shows if available. Winning entries from county shows will be sent to the state show. If no county/area show is available, growers may enter pecans directly by sending samples to Becky Carroll, 358 Ag Hall, OSU, Stillwater, OK 74078. Samples should arrive by January 16, 2009.*

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 2 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 28 classes:

1. Apache  
2. Barton

3. Burkett  
4. Cheyenne

5. Choctaw  
6. Comanche

7. Graking	16. SanSaba Improved	25. Wichita
8. Gratex	17. Schley (eastern)	26. Other Cultivars
9. Kanza	18. Shawnee	27. Large-Native
10. Kiowa	19. Shoshoni	(seedling) 60 nuts/lb
11. Mahan	20. Sioux	or larger
12. Maramec	21. Squirrels Delight	28. Small-Native
13. Mohawk	22. Stuart	(seedling) more than 60
14. Pawnee	23. Success	nuts/lb
15. Peruque	24. Western	

- 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 26 (Other Cultivars), Class 27 (Large-seedling) and Class 28 (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.
- Only first and second place winners in each class of each county/area show will be eligible to compete in the State Pecan Show. Following each county show, eligible entries will be placed in cold storage, and judged before 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.
- 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 16, 2009 at the following address:

Oklahoma State University  
 Department of Horticulture & LA  
 Attn: Becky Carroll  
 358 Ag Hall  
 Stillwater, OK 74078



## **2008 Oklahoma Cucurbit Production and Marketing Educational Meeting**

*Jim Shrefler*

The 2008 Oklahoma Cucurbit Production and Marketing Educational Meeting is an event that focuses on cucurbit vegetables. Traditionally important crops in Oklahoma and surrounding region; watermelon, cantaloupe, squash, pumpkins and others continue to be important to numerous growers and gardeners. This year's meeting will be held Wednesday, December 10, from 9 a.m. to 3 p.m. at the Fairgrounds Community Building in Chickasha. The event is designed to provide information valuable to Extension Educators, market garden and commercial growers and agricultural supply businesses. The meeting will focus on cucurbit vegetable production and management in plasticulture systems. Talks will address fertilization, irrigation, insect, disease and weed control, to name a few. Updates will also be provided on various issues of importance to Oklahoma cucurbit production. The event will include a noon meal. Pre-registration is requested. Watch for further details at [www.lane-ag.org](http://www.lane-ag.org) or contact the Lane Agriculture Center at 580-889-7343 or by email [jim.shrefler@okstate.edu](mailto:jim.shrefler@okstate.edu).

## **Master Gardener Corner**

*David Hillock*

**Horticulture Industries Show (HIS)** - January 16-17, 2009. The HIS program is nearly complete and preregistration forms will be mailed late November – early December. This year HIS will be held in at the Holiday Inn City Center in Fort Smith, AR. All Master Gardeners are invited to attend. If you are a returning Master Gardener you can receive Continuing Education hours that will count towards the minimum 20 hours you need to keep active status. Remember, however, that only the time actually spent in class counts as training received. Travel and in-between times do not count.

Though we do offer a Master Gardener/Public Garden session, you may also choose from any other session offered during the conference. There are 6 commodity groups represented during HIS, all conducting seminars, workshops, and business meetings. You may choose from any of the following groups – Vegetables/ Farmers Market, Fruit, Herb, Sustainable Agriculture, Master Gardener/Public Garden and Christmas Tree.

Topics for the Master Gardener/Public Garden session on Friday includes: *The Use of Rain Barrels in the Landscape; Dogwood Anthracnose Update; More than just Plants—Programs at the Botanical Garden of the Ozarks; Invasive Ornamental Plants; What is New and Exciting at Peel Mansion & Compton Gardens in Benton County; Fruiting Vines for the Backyard; Building a Strong Foundation for the Garden—Soil Preparation; and A Recap of This Season's Poinsettia Sales at Ark. Tech.* Saturday topics: *Cultivating the Garden in a Child's Mind; Connecting Children to Nature Through Literature; Gopher Control; The Easiest Fruits for the Home Garden; Common Ornamental Insect Pests; and Growing a Greener Landscape.*

This should be another great conference, hope to see you there!

***Gardening at the Edge of the Prairie* - State Master Gardener Continuing Education Conference – June 4-5, 2009.** Next year the Washington County Master Gardeners are hosting the State Master Gardener Conference in Bartlesville. The conference will be held June 4-5, 2009 at the Tri-County Technology Center. The theme – *Gardening at the Edge of the Prairie* will focus on helping the Master Gardener better serve their communities. Thursday, June 4 will be an evening social at the Frank Phillips Mansion. Regular conference activities will begin on Friday, June 5. We hope that you will mark your calendars and plan to attend. Planning and organization of the conference is still underway, but you can keep updated of the progress by visiting <http://www.hortla.okstate.edu/hortla/mastergardener.htm>.

## **Upcoming Horticulture Events**

**Greenhouse IPM Conference  
November 5, 2008, OSU, Stillwater, OK**

**Water Issues in Horticulture Conference  
December 4, 2008, Stillwater, OK**

**Horticulture Industries Show (HIS)  
January 16-17, 2009, Holiday Inn City Center in Fort Smith, AR**

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or [stephanie.larimer@okstate.edu](mailto:stephanie.larimer@okstate.edu).