Horticulture Tips
December 2013

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

GARDEN TIPS FOR DECEMBER!

David Hillock

Lawn & Turf

- Remove leaves from cool-season grasses or mow with a mulching mower. (HLA-6420)
- Continue mowing cool-season lawns on a regular basis. (HLA-6420)
- Continue to control broadleaf weeds in well-established warm- or cool-season lawns with a post-emergent broadleaf weed killer. (HLA-6421)

Tree & Shrubs

- Select a freshly cut Christmas tree. Make a new cut prior to placing in tree stand. Add water daily.
- Live Christmas trees are a wise investment, as they become permanent additions to the landscape after the holidays.
- Light prunings of evergreens can be used for holiday decorations. Be careful with sap that can mar surfaces.

Flowers

- Apply winter mulch to protect rose bush bud unions and other perennials. Wait until after several early freezes or you will give insects a good place to winter.
- Poinsettias must have at least six hours of bright, indirect light daily. Keep plants away from drafts.

Fruits & Nuts

- Cover strawberry plants with a mulch about 3 to 4 inches thick if plants are prone to winter injury.
- Wait to prune fruit trees until late February or March.

General

- Keep all plants watered during dry conditions even though some may be dormant.
- Irrigate all plantings at least 24 hours before hard-freezing weather if soil is dry. (HLA-6404)
- Order gardening supplies for next season.
- Now is a great time to design and make structural improvements in your garden and landscape.
- Send for mail-order catalogs if you are not already on their mailing lists.
- Christmas gift ideas for the gardener might include tools, garden books, magazine subscriptions or membership to The Botanic Garden at Oklahoma State University (http://www.botanicgarden.okstate.edu/).
- Clean and fill bird feeders.

- Make sure indoor plants are receiving enough light or set up an indoor fluorescent plant light.
- Till garden plots without a cover crop to further expose garden pests to harsh winter conditions.
- Visit your county extension office to obtain gardening fact sheets for the new gardening season.
- Join a horticulture, plant or urban forestry society and support community "greening" or "beautification" projects.
- Review your garden records so you can correct past mistakes. Purchase a new gardening journal or calendar to keep the New Year's gardening records.

GARDEN TIPS FOR JANUARY!

- If precipitation has been deficient (1" of snow = ~ 1/10" of water), water lawns, trees and shrubs, especially broadleaf and narrowleaf evergreens. Double check moisture in protected or raised planters.
- Check on supplies of pesticides. Secure a copy of current recommendations and post them in a convenient place. Dilution and quantity tables are also useful.
- If you did not treat young pines for tip borers in November, do so before March.
- Check that gardening tools and equipment are in good repair—sharpen, paint and repair mowers, edgers, sprayers and dusters.
- Inspect your irrigation system and replace worn or broken parts.
- Control overwintering insects on deciduous trees or shrubs with dormant oil sprays applied when the temperature is above 40°F in late fall and winter. Do not use "dormant" oils on evergreens. (EPP-7306)
- A product containing glyphosate plus a postemergent broadleaf herbicide can be used on dormant bermudagrass in January or February when temperatures are above 50°F for winter weed control. (HLA-6421)

Winterizing Your Irrigation System

Malarie Gotcher, Extension Associate and Justin Quetone Moss, Assistant Professor

Preparing your lawn irrigation system for the winter prolongs system life and can potentially reduce maintenance costs in the spring. Water left in the pipes can freeze and may cause damage to irrigation system components. There are different methods for draining excess water depending on what type of sprinkler system you have. The main methods for winterizing irrigation systems are manual drain, automatic drain or the blow-out method. If you are unsure or don't feel comfortable winterizing your system, consult with a landscape professional.

Manual Valves – If your system is equipped with a manual drainage valve, shut off the supply of water to the system. Open all of the valves at the ends of the piping. Allow the water to drain from the system. After the water has drained out, open the drain cap on the stop and waste valve to remove the remaining water between the shut off valve and backflow device. If your sprinklers

have check valves you should pull up on the sprinklers to let the water drain out of the sprinkler body.

Automatic Valves – This method can be used when automatic drain valves are at the end and lowest point of the irrigation piping. The valves will automatically open and drain water when the pressure falls below 10 PSI. Activate the automatic valves by turning off the water supply and running one zone. After the water has drained out, open the drain cap on the stop and waste valve to remove the remaining water between the shut off valve and backflow device. If your sprinklers have check valves you should pull up on the sprinklers to let the water drain out of the sprinkler body

Blow-out Method – The blow-out method should be used if you're unsure of your system type. Be very careful, stand away from irrigation components and wear eye protection when blowing out an irrigation system. You'll need an air compressor with a cubic foot per minute rating of 80 to 100 for a mainline of 2 inches or less. First, shut off the water supply and attach the compressor to the mainline. Do not blow compressed air through a backflow device or flow sensors. To start, activate the station on the controller that has the zone of highest elevation and is furthest from the compressor. Slowly open the valve on the compressor and make sure it is below the lowest pressure rated component for each zone. Work your way to the closest zone using short cycles per zone until no water can be seen from the sprinkler heads. A professional contractor should be consulted if you're hesitant to perform this method.

There may be times when lawns need irrigation water during the winter. If there is a prolonged period with no precipitation, the soil and plants may become dry. Adequate soil moisture is important for survival of turfgrass plants during the winter and green up the following spring. If it is necessary to water during the winter, choose a relatively warm day or period during the winter, turn the system back on, irrigate the lawn, then repeat the winterization process before freezing temperatures return.

Winter Irrigation Tips

- Disconnect, drain and store garden hoses.
- Winterize rain barrels by draining water and storing if possible.
- Watering newly planted landscapes plants may be needed during dry winter months. Use a garden or soaker hose when necessary. Make sure to re-drain and store if freezing temperatures are in the forecast.
- Turn irrigation system controllers to the "OFF" position.

Sharpen That Blade Now!

David Hillock

As mowers are put away for the season, one of the more important maintenance practices suggested is to sharpen that blade! Studies have shown that some of the problems we have with weakened lawns may not be due to environmental stresses, but can be directly linked with failure to keep the mower blade sharp. A dull mower blade rips the grass, instead of cutting it cleanly.

The ripping action makes a long, slow healing wound that makes disease invasion more pervasive. It can also lead to extensive tip dieback of the grass blade itself that reduces the effective photosynthetic area left to the grass following a cut.

Mower blades should be sharpened on a regular basis, and there is no better time to do it than as that mower is stored for the winter. This insures that the first cut is a good "sharp" one!

Christmas Trees

David Hillock

Christmas Trees: Past and Present – Christmas trees, as evergreens brought indoors, may have originated from the northern European celebration of the winter solstice. At the darkest time of the year, evergreens provide a symbol of the continuation and renewal of life. An evergreen holds its leaves - or needles - for more than one year, so green leaves continue to grow while the oldest leaves die and fall away.

According to legend, northern Europeans used evergreens in their Christmas celebrations as early as the eighth century AD. People most commonly used conifers and needle-leafed trees, but broadleaf evergreens became holiday symbols in regions where conifers were rare - like holly in England.

Christmas trees have been a tradition in the United States since the Revolutionary War, when homesick Hessian soldiers decorated fir trees as was their custom in Germany. Since then the custom has spread. It is now difficult for many people to imagine Christmas without the Christmas tree tradition. Today, the tradition of the Christmas or holiday tree can be found in most areas of the world.

Today there are several options when it comes to choosing a Christmas tree including cut trees, potted or balled trees and artificial trees. Cut, live trees are the most common type of Christmas tree. Three options are available to a person wanting a cut Christmas tree: a pre-cut tree purchased from a dealer, a choose-and-cut tree purchased from a local grower or a wild-grown native Christmas tree.

Cut Trees – Great care needs to be taken in selecting a pre-cut tree. Most pre-cut Christmas trees sold in Oklahoma are grown in the Lake States and the Pacific Northwest and may have been cut as early as August. However, some trees are locally grown and thus will be fresher and less prone to drying out too quickly. As soon as a Christmas tree is cut it begins to dry. A tree that has dried will not recover when placed in water and is a fire hazard. Dry trees also tend to lose needles.

Follow these steps to be sure the tree you buy is fresh and of high quality.

1. Gently pull on the needles. They should be tightly attached to the twig.

2. Shake the tree vigorously or bounce the butt on the ground. If green needles fall, look further. Dead, brown needles falling from the inner part of the tree are older needles and are less of a problem.
3. Check to see that the tree has a fresh, green color. Some trees are sprayed with a blue-green dye. This dye is harmless, but be sure it's not hiding a dry tree. Some trees like scotch pine tend to be light green in color during colder weather, but will darken up once moved indoors.
4. Buy early before all the desirable trees have been sold.
5. Fir and pine trees hold needles better than spruce trees.
6. Break a few needles. They should be flexible and will feel moist or possibly sticky. They should also be fragrant when crushed.
7. Be sure limbs are strong enough to support lights and ornaments. Limbs should also be well placed to give the tree a pleasing shape. Minor defects can often be turned toward a wall, however, and can lower the purchase price.
8. Ask the dealer if the tree was locally grown. Local trees are much more likely to be fresh because they are cut nearer Christmas and aren't shipped long distances.

Choose-and-cut trees are available from Christmas tree growers throughout Oklahoma. Trees available from Oklahoma growers include Virginia pine, Scotch pine, eastern white pine, Austrian pine, ponderosa pine, white pine, Norway spruce and concolor fir.

Each one offers a different experience, but one that is always a fun and memorable one for the family. Some of the farms offer more than just Christmas trees – wreaths, garland, table decorations and gifts may be available too. To make the experience more memorable some also offer free hot cider, hot chocolate, coloring books and candy canes as well as children's activities.

A free marketing directory produced by the Oklahoma Christmas Tree Association shows 17 different farms across the state in 2013. The 2013 marketing directory lists members of the Oklahoma Christmas Tree Association with trees for sale this holiday season. These Oklahoma grown trees are beautiful fresh green Christmas trees, which were carefully planted and nurtured for years specifically for you this Christmas.

For more information about Oklahoma Christmas trees go to www.okchristmastrees.com or contact your local Extension office.

Buy a choose-and-cut tree the way you would a precut tree. Freshness and health are still the most important characteristics. The grower will usually have many trees marked for sale in various sizes. Some growers will cut the tree for you and others will expect you to cut your own.

Native trees can also be used as a Christmas trees. If you cut your own native Christmas tree, be sure you get the landowner's permission. Trespassing is illegal, even to cut what may be an unwanted tree.

Potted or Balled Trees – Some people buy a potted or balled Christmas tree with roots intact in the hope of having a new landscape tree come spring. This is very difficult to do successfully, but your chances of success increase if the tree is treated right.

1. Buy a healthy tree from a reputable nursery or grower. Expect to pay a higher price than for a typical Christmas tree.
2. Keep the tree in a shaded area or a non-heated garage until it is brought inside.
3. Keep the soil in the ball or pot moist until well after it is transplanted after Christmas. A frozen ball need not be watered if the crown is shaded and protected.
4. Lift and carry the tree by the ball or pot, not the top.
5. Keep the tree in the house no longer than about one week, five days or less is even better.
6. Have the tree's planting hole dug before the soil freezes and keep the fill dirt thawed. The planting hole and backfill can be protected from freezing by covering with plastic and then a thick layer of straw.

Artificial Trees – Artificial trees must be used carefully. Electric lights should not be used on metal trees because of the danger of electric shock. Light these trees with off-the-tree spotlights. Plastic trees may be fire resistant but the fumes they give off when burned are toxic.

Cut Tree Care – To insure a safe and happy holiday, you need to know a few things about caring for Christmas trees.

Once you have chosen a fresh Christmas tree, do your best to keep it fresh. A tree can stay fresh and healthy for several weeks if it is well cared for.

1. When you get the tree home, cut about an inch off of the butt end to aid in water absorption. Get the cut end into a container of plain water quickly. There is no need to add aspirin, sugar or flame retardant to the water.
2. If the tree is not set up right away, store it in a protected, shady, unheated area. Cut the end and place the tree in a bucket of water.
3. When the tree is brought into the house, saw a slice of the butt again to insure water absorption.
4. Use a sturdy stand with a large water reservoir so it won't dry out. A fresh tree can use 1 quart or more of water a day, so water daily. A tree is beginning to dry out if its water use slows or stops.
5. Keep the tree away from heat sources such as fireplaces, televisions, radiators and air ducts. Never have open flames on or near a Christmas tree.

Decorating the Tree – Use only electric lights on your tree, never candles. Lights and cord should have the Underwriters Laboratories safety seal. Discard old damaged Christmas lights. New lights are relatively inexpensive, use less electricity and stay cooler than old lights. Follow directions to determine how many strings to put on one circuit. Be sure to turn off the tree lights when no one will be in the room for any length of time.

Tree Disposal – Christmas trees can be useful even after they are taken down. Trees can be placed in the yard to add greenery and act as a bird haven until spring. Tie fruit peelings, popcorn or other favorite bird snacks to your tree for bird feed. Christmas trees can be used for firewood or chopped up and used as mulch. The branches can be cut off the tree and used as a mulch to protect landscape plants as well. Many communities have programs to gather trees after Christmas to be chipped for mulch or other uses. Trees can also be used to create a fish attractor by weighting the base of the tree and sinking it in a pond.

Poinsettia Care

David Hillock

The poinsettia (*Euphorbia pulcherrima Willd*.) is the traditional Christmas plant. It is native to Mexico and was introduced to the United States by Joel Poinsett, the first U.S. Ambassador to Mexico. In mild climates such as Florida and California the poinsettia is also grown in the landscape, but is not winter-hardy in Oklahoma.

The striking beauty of the poinsettia is found in the showy bracts, which are specialized leaves, surrounding the true yellow flowers. Plants with red bracts are most popular, but plants with yellow, pink, white and variegated bracts are also available.

The newer cultivars of poinsettia, in addition to being very showy, have excellent keeping quality and stronger stems than older cultivars. When buying your poinsettia, choose a plant with well-expanded, well-colored bracts. Foliage should be medium to dark green with uniform coloring. Flowers should be present in the center of the bracts.

(1) After you purchase your plant, do not expose it to chilling temperatures or cold drafts of air. If the temperature outdoors is below 50°F, do not carry an unwrapped plant from the retail shop to your car. In the home or other place of display, avoid cold drafts and excessive heat from heating ducts, television sets or large incandescent lamps. Temperatures of 70°F or below (down to 55°F) are desirable to retain best bract color. Large plants can be placed on the floor if light is adequate.

(2) Light plays an important role in retention of leaves on the plant. Place the plant in an area where it receives at least six to eight hours of direct natural or artificial light. A minimum of 75 foot candles is desirable where possible. This would be similar to the minimum light intensity required for good desk lighting in an office. Incandescent lights such as those found in most homes will give a truer, brighter bract color than most types of fluorescent light.

(3) Poinsettias can be displayed with other houseplants. The adjacent plants raise the humidity and allow poinsettias to last longer. Also, the regular houseplants can be spruced up for the holidays.

(4) Many commercial growers use non-soil mixes of sphagnum peat, pine bark, vermiculite, perlite or similar ingredients. When plants are grown in such non-soil mixes, it is sometimes difficult to decide when the plant needs water. If there is no heavy component (sand or soil) in the mix and a plastic pot is used, the pot can be lifted to determine its weight. If the plant is heavy, there is usually plenty of moisture in the pot; if it is lightweight, the medium is dry and a thorough watering should be given. Moisture needs can also be assessed by feeling the growing medium in the pot. Water when the top of the growing medium is starting to feel dry, but do not allow too much drying. Slight wilting of the plant is not harmful, but avoid severe wilting, which will cause leaves to drop. Water the plant thoroughly. Make sure a small amount of water drips through the drainage holes of the container. If the plant is wrapped with decorative foil, punch a hole in the foil beneath the pot to allow excess water to escape. The plant should be placed on a saucer to prevent damage to the furniture or carpet. Do not water the plant too frequently when the soil or growing mix is already wet or this may result in roots suffocating from lack of oxygen, causing the leaves to wilt, yellow, and drop.

(5) Recent research has shown that poinsettias are not poisonous, but the plants are intended solely for ornamental purposes. Some people are allergic to the milky sap and may develop a rash when exposed to the sap. Avoid breaking the leaves and stems, as this will release the sap. It is wise to keep any houseplant out of the reach of small children and pets.

Deicing Effects on Landscape Plants

David Hillock

Cold temperatures usually bring ice and snow making it difficult to travel for both motorists and pedestrians. Public safety during this time is a high priority and usually addressed by the use of deicing compounds. While these deicing compounds make it safer for us, they often damage concrete surfaces, automobiles and landscape plants.

There are several deicing compounds, each with pros and cons.

Sodium chloride (NaCl) is the most common and known as table or rock salt. It is the least expensive, most widely used and is most effective when temperatures are above 15°F. Unfortunately sodium chloride is very corrosive and damaging to landscape plants and excessive sodium in the soil can destroy its structure.

Calcium chloride (CaCl2) dissolves readily, acts quickly and is effective in very cold temperatures - down to -20°F. It is, however, highly corrosive to concrete and metals, but slightly less damaging to plants than sodium chloride.

Potassium chloride (KCl) is a natural material used for fertilizer, but is highly corrosive as a deicer. It is less damaging than sodium chloride to plants.

Calcium magnesium acetate (CMA) is an environmentally friendly compound derived from dolomitic limestone and acetic acid. CMA is considered safer for plant material, non-corrosive to concrete surfaces and biodegradable. It is also effective at melting ice to around 15°F. The downside, it is 30 to 40 times more expensive.

Deicing materials are salts that melt ice, creating a brine solution (salty water) which freeze at lower temperatures. The problem in the landscape occurs when this brine solution is splashed onto plant foliage or runs off pavement into the soil. An accumulation in the soil near plant roots results in damage to the plants. Plants suffer a salt-induced water shortage, even though there may be moisture in the soil, because roots are unable to absorb sufficient water.

To minimize damage by deicing materials in the landscape consider the following approaches:

- Mechanical removal – the less ice and snow present, the less deicing material needed.
- Use abrasive materials in conjunction with mechanical and/or deicing materials – abrasives such as sand have few impacts on the environment. They do not melt ice, but do improve traction on slippery surfaces.
- Plan ahead – plant salt tolerant plants in areas receiving large amounts of deicing material; locate salt sensitive plants away from areas deicing materials are used; use hardscapes (gutters, barriers) to channel runoff away from planting areas; do not pile snow containing deicing materials onto planting areas; and irrigate once heavily in the spring to leach salts away from root zone.

2013 Tomato Trial Results

Lynn Brandenberger, Extension Horticulture Food Crops Specialist

Tomatoes have been produced in Oklahoma since people began gardening here. Oklahomans want locally grown fresh produce and tomato is one of those must have items for all of us. Within the vegetable crop group, tomatoes require high levels of management and attention to detail in order to be successful. One of the biggest problems for tomato growers is fruit set which usually stops completely during the hotter periods of June and July. In 2011 and 2012, farmers had difficulty growing tomatoes for market due to the intensely hot weather that was experienced. Farmers continue to request help with this ongoing problem. The objective of these trials was to trial tomato varieties for heat-set capabilities and use plasticulture to manage soil temperature and moisture levels to decide if gains can be made in tomato yield during the hot months of summer.

During 2013 five different tomato grower trials were completed around the state. A majority of the trials had the same 12 varieties and locations varied from west-central to eastern areas of the state. Each trial's results have been written and will be available in the 2013 Vegetable Trial Report MP-164. The trial report will be available on-line sometime in December at http://www.hortla.okstate.edu/industry/vegetables/index.htm.

Trial results will also be presented at the 2014 Horticulture Industry Show (HIS) Friday, January 10, 2014. At HIS printed copies of the Vegetable Trial Report will be available while supplies last. Stay tuned for more specific information on the 2013 trials.

New Publication

David Hillock

L-440 Tree Planting Guide – This leaflet is a simple, front and back publication that discusses the proper way to plant and take care of new trees. A list of recommended trees for Oklahoma is also included.

Continuing Education/In-service Opportunity for Master Gardeners and County Educators

David Hillock

It is not too late to register for the Horticulture Industry Show (HIS) on January 10-11, 2014. HIS provides an opportunity to learn more about vegetables, fruits & sustainable agriculture, farmer's markets, landscape horticulture and Christmas trees.

This year HIS will be held at the Tulsa Community College Northeast Campus, Tulsa, OK. All Master Gardeners and County Educators 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 member status. If you are a County Educator, you can receive in-service hours by attending.

Register today by going to the conference website http://www.hortla.okstate.edu/his/. Registration before December 20 is $50 for the two-day conference or $35 for one day. After December 20 registration goes up to $75 for two days and $43 for one day so don't delay and register before December 20.

2014 Southeast Oklahoma Turf & Landscape Maintenance Training Program

Jim Shrefler

The 2014 Turf & Landscape Maintenance Training Program is scheduled for January 16, 2014. The event will be held at the Pontotoc Technology Center in Ada, Oklahoma. This event is being planned to provide training that will benefit those such as Turf Managers, Groundskeepers, Sports Field Managers, Community Outdoor Maintenance workers and Commercial Landscapers. The topics that will be addressed are selected to address current technology trends, common management issues and other topics that will enable turf and landscape managers to improve their management skills. Presentations will address areas such as weed and pest management, nutrient management, climate and weather outlook and resources, irrigation management and tree planting and care.

Speakers will include specialists from Oklahoma State University and the Oklahoma Climatological Survey. The meeting format includes general session presentations in the morning. Following an on-site lunch, afternoon concurrent talks will allow attendees to choose topics based on their interests. For more information, call the Pontotoc County Extension Center at 580-332-2153. Pesticide applicator CEU will be provided. The agenda will be posted at http://www.oces.okstate.edu/searea/Horticulture and registration details will be available soon.

2014 Grape and Pecan Management Courses Available

Becky Carroll

Brochures are now available detailing the 2014 Grape and Pecan Management Courses. Both courses offer an opportunity for potential new or veteran growers to learn or refresh their basic management skills needed to successfully grow each crop. The classes meet one afternoon a month beginning in February (Grape) and March (Pecan) and continuing for the growing season. Having the classes through the season gives participants the chance to see what management requirements are necessary at specific times. Students learn in both the classroom and in the vineyard or orchard setting. The classes meet at the Cimarron Valley Research Station near Perkins. Classes also travel to a couple of established orchards or vineyards/wineries to learn from other growers.

The cost for enrollment in either course is $250 per student. Pecan course members are also eligible to use the online pecan management course for no charge. Registration for the grape course is due by February 14 and the pecan course by February 28. For registration information, visit http://www.hortla.okstate.edu/.

The courses not only can help growers learn but are a great opportunity for County Extension Educators to hone their skills with these crops. Educators can take the course at no cost. The online Pecan Management Course is also available to county educators who would like to learn more about pecans. The online pecan class is located at http://pecan.okstate.edu/. For more information about the contents of the class, please contact Becky Carroll at becky.carroll@okstate.edu or 405-744-6139.

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