Horticulture Tips
October 2011

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

GARDEN TIPS FOR OCTOBER!

David Hillock

Turfgrass

- You can continue to replant or establish cool-season lawns like fescue.
- The mowing height for fescue should be lowered to approximately 2½ inches for fall and winter cutting.
- Broadleaf weeds like dandelions can be easily controlled during October.
- 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 degrees Fahrenheit.
- 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.

Fall Lawn Maintenance Brings Spring Beauty

Courtney Sidwell, Justin Quetone Moss, and Dennis Martin

It's that time of year again to prepare your lawns for the coming spring. Fall maintenance is probably the most important season of maintenance, because it helps equip plants with everything necessary to survive the winter weather and come back with vigor in the spring. Maintenance includes fertilization, mowing, over-seeding and seeding, raking leaves and debris, watering, etc. Here are some important maintenance tips for your lawn this fall:

- Before any fertilizer is applied to your lawn and you have not done so in the last 3 years, get your soil tested. Fertilizing based on soil test results ensures that you only apply the needed nutrients to your lawn, saving you money and reducing risk of excess nutrients running off into nearby water sources. (L-249)
- If your cool-season lawn has not already been fertilized in September, an application can be made in early to mid-October. Cool-season lawns include Tall Fescue, Perennial Ryegrass, and Kentucky Bluegrass. Use a quick-release fertilizer for cool-season grasses. (HLA-6408, Tall Fescue Home Lawn Care - Garfield County)
- If you have had substantial damage to your cool-season lawn or are establishing a cool-season lawn from scratch, seed the perennial lawn in late September to early October. Mid-October is the deadline for this, or when daily low and high temperatures range from the 60s to 86°F. (HLA-6408, HLA-6419)
- Over-seed your warm-season lawn with cool-season grasses during mid to late-October, once warm-season grass growth has slowed, or when daily low and high temperatures range from the 60s to 86°F, NOT during the winter months. November and December are too cold for optimal germination and establishment of cool-season grasses in Oklahoma. (HLA-6408, HLA-6419)
- Even if warm-season grasses such as Bermudagrass, Zoysiagrass, St. Augustinegrass, and Buffalograss have quit growing, continue to mow the cool-season grasses in your lawn. Continue to mow until grass growth slows down significantly, which is typically sometime after the first hard frost. This will prevent the grass from laying over on itself and matting the lawn, which could be harmful when it gets cold and wet and cause potential disease problems in the spring.
- Remove leaves from lawn or use a mulching mower. Leaving leaves on the lawn can smother the grass underneath, especially when the leaves get wet or cold, or both.

Continue this task all season until leaves have ceased to fall on lawn. One exception would be if you have a St. Augustinegrass lawn. Leaves are often used as mulch to protect this cold-sensitive species from winter damage. (HLA-6408)

- Apply post-emergent broadleaf weed killer during October and November, but avoid getting it on seedling fescue. Broadleaf weeds include henbit, chickweed, and dwarf fleabane. Post-emergent herbicides for broadleaf weeds include 2, 4-D, Banvel, MCPP, and quinchlorac combinations (Trimec, Weed-B-Gone, Spectricide Weed Stop for Lawns, Bayer Advanced Lawn Weed & Crabgrass Killer). (HLA-6421)
- Fertilize your cool-season lawn again during November/December 1. (HLA-6408, HLA-6420)
- Last but not least, remember that plants always need water! Pay attention to soil moisture and irrigate lawn when soil is dry down to a 3-inch depth if there is no rain in the forecast.

Moving Plants Indoors for Winter

David Hillock

If you brought houseplants out into the summer sunshine, you want to start thinking about preparing them for their return journey indoors. As a general rule, you will want to move houseplants indoors around the time that the outside temperature is about the same as the indoor temperature. This will give plants a chance to adjust to the indoor climate before you turn on the heat and avoid unnecessary cold damage to tropicals.

Moving a plant directly from its perch on the sunny patio to its winter home in the dark living room is not advisable. You will shock the plant with the drastic change in light conditions. Instead, acclimate the plant or slowly adjust it to lower light levels. Do this by moving plants to more and more heavily shaded areas over the course of a week before finally bringing it inside.

Be sure to inspect plants for insects and diseases and treat accordingly before moving indoors.

(By Kim Toscano, *Oklahoma Gardening* Show Notes – October 2 and 3, 2010)

Harvesting Sweet Potatoes

David Hillock

Sweet potatoes are warm-season plants and are very sensitive to cold temperatures. It is best to dig the crop of sweet potatoes before or just after the time of the first frost in the fall. Sweet potato roots continue to grow until frost kills the vines. Roots can be left in the ground until the time of a frost; however, an extremely hard frost can cause damage to roots near the surface. And if the soil temperature drops to 50°F or lower, chilling injury to the roots may result. If a frost occurs before you harvest, cut the vines to prevent decay spreading from the vines to the roots and dig sweet potatoes as soon as possible.

To dig the sweet potatoes, use a spading fork or stout shovel and be careful not to bruise, cut or otherwise damage the roots. Dig below the level of the ridge and gradually move closer toward the plants, removing soil until the fat roots are exposed. Carefully dig under these roots to gauge the depth as you dig down the row.

Care should also be taken during handling to avoid skinning and bruising the roots. Even a small wound can easily become infected with decay organisms. Dropping potatoes into baskets and buckets can cause damage. Line containers with rags, newspaper or other soft material to avoid scratching the roots. Do not store badly injured or diseased roots. Discard these or use them immediately.

Do not store sweet potatoes with large amounts of soil clinging to the roots, but sweet potatoes are easily damaged during the washing process when freshly dug. Allowing roots to dry and cure before removing excess soil will help in avoiding unnecessary damage. Begin the curing process by allowing the sweet potatoes to dry in the sun for two to three hours.

After they have dried, move them indoors for curing. The flavor and storage quality of sweet potatoes is greatly improved by curing at warm temperatures. During the curing process starch is converted to sugar. Ideally, cure sweet potatoes by holding them for about 10 days at 80-85°F and high relative humidity (85-90 percent). Most of us do not have areas with these ideal conditions in our homes. A good place to cure sweet potatoes in the home is near your furnace. The temperature will more likely be somewhere between 65 and 75°F. At this temperature, the curing period should last 2 to 3 weeks. To maintain the required high humidity for curing, stack storage crates or boxes and cover them with paper or heavy cloth.

Once the sweet potatoes are cured, move them to a dark location where a temperature of about 55 to 60°F can be maintained during storage. Sweet potatoes are subject to chilling injury, so keep them out of the refrigerator. Outdoor pits are not recommended for storage because the dampness encourages decay and temperatures can be too cool. Good results can be obtained by wrapping cured sweet potatoes in newspaper and storing them in a cool closet. Sweet potatoes treated this way will store for several months. Remove any roots that show signs of deterioration or decay.

What makes sweet potatoes crack and split? Heavy rains or too much irrigation during the final 3 to 4 weeks before harvest may cause the roots to split, especially if conditions have been dry for a period before late water application begins.

What causes sweet potato roots to be long and stringy? This condition is caused by high fertility. The edible portion of the sweet potato plant is a storage root. Luxurious growing conditions cause vigorous vine growth and result in poorly-developed stringy roots. Maturity and variety also affect the texture of sweet potatoes.

When I harvested my sweet potatoes, they were rough and the surface was cracked. This can be caused by two things. One is fluctuating moisture levels within the soil; and, other is root knot nematodes. If nematodes are suspected, check the part of the root closest to the plant for small

necrotic lesions in the sweet potato. If nematodes are found, use the resistant variety Jewel in future plantings.

After I dug my sweet potatoes, I found as much as one-half of each sweet potato covered with a black, necrotic scab which decays rapidly. This is sweet potato scurf and is caused by a soil-borne fungus. It is controlled by growing sweet potatoes in acid soil. Also, the use of disease-free slips and rotating crops helps prevent the disease.

(By Kim Toscano, *Oklahoma Gardening* Show Notes – October 16 and 17, 2010)

Planting Cover Crops

David Hillock

Healthy soils are the key to a productive garden. A healthy soil is rich in organic matter, active with microorganisms, and full of nutrients. The most effective way we can improve soil health is by adding organic matter to our gardens. Organic matter helps maintain the pH balance of the soil, adds nutrients, and improves soil structure.

Cover cropping is a sustainable way we can build, protect, and enrich soils. Cover crops are grown with the sole purpose of being turned back into the soil. After being incorporated into the soil, the decomposing plants add organic matter back into the soil, providing essential elements, improving nutrient availability, water holding capacity and soil structure.

Legumes make excellent cover crops because of their ability to fix atmospheric nitrogen into the soil. Austrian Winter Pea is an example of a cool-season, annual legume with good, nitrogen-fixing capabilities. This low growing pea produces long vines, with hollow, slender stems reaching 2 to 4 feet long. 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.

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. Seeding rates listed in the table below are minimum rates. Two to four times the rate may be used to assure a good stand.
- 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 two weeks before planting garden crops.

Some Recommended Cool Season Cover Crops

Cover Crop	Minimum Seeding Rate (per 100 sq. ft.)
Legumes	
Alfalfa (*Medicago sativa*)	2.0 oz.
Arrowleaf Clover (*Trifolium vesiculosum*)	4.5 oz.
Austrian Winter Peas (*Pisum sativum* variety *arvense*)	3.0 oz.
Ball Clover (*Trifolium nigrescens*)	2.0 oz.
Birdsfoot Trefoil (*Lotus corniculata*)	3.5 oz.
Common/White Vetch (*Vicia sativa*)	8.0 oz.
Crimson Clover (*Trifolium incarnatum*)	1.5 oz.
Fava Bean (*Vicia faba)*	3.5 oz.
Garden Pea (*Pisum sativum* varieties)	3.5 oz.
Hairy Vetch (*Vicia villosa*)	1.5 oz.
Purple Vetch (*Vicia benghalensis*)	8.0 oz.
Red Clover (*Trifolium pratense*)	2.0 oz.
White Clover (*Trifolium repens*)	2.0 oz.
Yellow-Blossom Sweet Clover (*Melilotus officinalis*)	4.0 oz.
Grasses	
Barley (*Hordeum vulgare*)	4.5 oz.
Oats (*Avena sativa*)	5.0 oz.
Ryegrass (*Lolium* species)	1.5 oz.
Winter Rye (*Secale cereale*)	3.5 oz.
Winter Wheat (*Triticum* species)	3.5 oz.

For more information about these and other cover crops see OSU fact sheet **HLA-6436 Healthy Garden Soils**.

(Taken from *Oklahoma Gardening* Show Notes – October 23 and 24, 2010 by Kim Toscano and OSU Fact Sheet HLA-6436 – Healthy Garden Soils)

Forcing Bulbs for the Holidays

David Hillock

Many will be busy planting bulbs in the gardens soon, but you 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. Using a clear glass vase allows you to see the roots of the bulbs as they grow, but many different types of containers can be used, as long as 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. One easy method is 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 that 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. Do not 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 reason 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. To have a beautiful display around Thanksgiving, start your bulbs about mid to late October; 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.

(By Kim Toscano, *Oklahoma Gardening* Show Notes – October 30 and 31, 2010)

OKLAHOMA STATE PECAN SHOW 2011

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 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. 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 Oklahoma State University, Department of Horticulture, Attn: Becky Carroll, 358 Ag Hall, OSU, Stillwater, OK 74078. Samples should arrive by January 20, 2012.

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
8. Gratex
9. Kanza
10. Kiowa
11. Mahan
12. Maramec
13. Mohawk
14. Pawnee
15. Peruque
16. SanSaba Improved
17. Schley (eastern)
18. Shawnee

19. Shoshoni
20. Sioux
21. Squirrels Delight
22. Stuart
23. Success
24. Western
25. Wichita
26. Other Cultivars
27. Large-Native (seedling) 60 nuts/lb or larger
28. 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 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.
- Samples 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 20, 2012 at the following address:

  Oklahoma State University
  Department of Horticulture & LA
  Attn: Becky Carroll
  358 Ag Hall
  Stillwater, OK 74078-6027

Upcoming Horticulture Events

Tree Care Conference
November 16, 2011
The Botanic Garden Educational Center, Stillwater, OK

Speakers will address issues including but not limited to diseases in trees, tree growth regulators, appropriate tree selections for Oklahoma and more. This day-long event will also have a field laboratory session for attendees to hone their skills regarding various arboricultural techniques.

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or stephanie.larimer@okstate.edu.