

September 2009—Oklahoma Gardening Shows

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Oklahoma Gardening Information Sheet (#3613)

OETA air date: September 26 and 27, 2009

OETA airtime: Saturday 11:00 a.m., Sunday 3:30 p.m.

Oklahoma Horticulture Society: Garden Tour for Connoisseurs – In this episode we visit four of the home gardens that will be featured in the Oklahoma Horticulture Society's Garden Tour for Connoisseurs. The 2009 Tour will take place on Saturday, October 3, 9 a.m. – 4 p.m., with a rain date of Sunday, October 4 from noon to 4 p.m. Behind garden gates visitors will have the opportunity to view private areas designed by several of Oklahoma City's most distinguished professionals. Other gardens on the tour have been created by homeowners with the knowledge and skill to design, plant and develop private spaces that are unique in their presentation. Volunteers from the Oklahoma Horticultural Society and members of the Master Gardeners will be at each location to provide information and answer questions. Proceeds from the Tour support the educational goals of the Society which insures continued beautification of Oklahoma City's private and public spaces. Tickets are \$12 purchased in advance or \$15 the day of the event. Children under age 6 are free. Tickets can be purchased at the gardens on the day of the event or from select retail outlets. For a list of ticket sources and for more information, visit: <http://www.okhort.org/>.

We visited four of the seven gardens featured on the tour. Our first visit was to the country gardens of Jennifer and Hugh Stout, located near one of Oklahoma City's main thoroughfare. This landscape has the official designation as an Oklahoma WildScape. The extensive gardens, on five acres, are a palette for a wide variety of plant material and water gardens in a natural setting. These gardens have been featured on National Iris and Daylily Tours as well as the National Garden Writer's Tour in 2008. A most unusual feature of the Stout gardens is an Oklahoma red rock pavilion with a rustic metal roof situated adjacent to a Koi pond. Vendor booths featuring garden accessories and plant material will be at this location offering visitors an opportunity to plan and plant for the future. Plants shown at the Stout home are American Beautyberry (*Callicarpa Americana*), Brazilian Rock Rose (*Pavonia x gledilii*), Cluster-Head Dianthus (*Dianthus carthusianorum*) and Coral Bean (*Erythrina x bidwillii*).

A place of tranquil beauty to share with family and friends has been the vision of Kitty and Dick Champlin for nearly fifty years. Dragon Wing Begonia's in large pots hint at the treat that waits behind garden gates. Kitty continues to refine and develop their gardens while Dick encourages her every effort. In recent years they have had to adapt their efforts from a deep shade garden to a sun filled area. In a secluded spot at the back of the yard Kitty added a "trash garden" utilizing found objects. The Champlain's gardens are a favorite stopping place for the Belle Isle neighborhood tour and the couples many friends.

As you walk to the door of Kim and Mickey Sullivan's home you are greeted by a variety of blue-foliaged evergreens including a large 'Blue Ice' Arizona Cypress (*Cupressus arizonica* var. *glabra* 'Blue Ice'). A dry creek runs through one of several island beds beneath a mixed canopy of native and unique specimen trees. Rare trees include the 'Lion's Head' Japanese Maple (*Acer palmatum* 'Shishigashira') and the 'Thunderhead' Japanese Black Pine (*Pinus thunbergiana* 'Thunderhead'). The property includes a number of intimate spaces for relaxation including a magnificent stone fireplace draped with a brilliant Pink Mandevilla (*Mandevilla spp.*). The planting around the patio and pool include a vibrant mix of hardy perennials and flashy tropical's. Enormous Elephant Ears (*Xanthosoma sagittifolium*) stretch out over a waterfall that trickles into the pool. The beautiful hardscape is

complemented by rich planting of evergreens to provide year round scenery.

The gardens of Cheryl McIntosh include forty varieties of trees and shrubs in an Oklahoma WildScape setting. A grassy hillside pathway leads visitors to the Cobblestone neighborhood pond. A waterfall feature adjacent to the back patio offers an arrangement of large boulders where water cascades into river rock. A Koi pond surrounded by hostas has three distinctive bubblers recreating a tranquil place for wildlife. Plantings include trees and shrubs that provide berries and food for the fifty-two identified species of birds that frequent the gardens. Plants shown at the McIntosh home are Weeping Cherry (*Prunus subhirtella* var. *pendula*), Alaska Cedar (*Chamaecyparis nootkatensis*), Weeping Blue Atlas Cedar (*Cedrus atlantica* 'Glauca Pendula'), Weeping Cedar of Lebanon (*Cedrus libani* 'Pendula'), Cypress Vine (*Ipomoea quamoclit*) and Crested Cock's Comb (*Celosia cristata*).

Cooking with Barbara – Barbara Brown, Extension Food Specialist, makes a potato and cabbage chowder.

Potato and Cabbage Chowder

- 4 medium russet potatoes, peeled and cut in 3/4-inch chunks
- 14-ounces fat free, reduced sodium chicken broth
- 1 cup water
- 2 tablespoons vegetable oil
- 3 cups coarsely chopped green cabbage
- ¾ cup onion, finely chopped
- 8 ounces smoked turkey sausage, sliced in 1/4-inch rounds
- 1 medium carrot, shredded
- 1/2 cup fat free milk
- 1/2 teaspoon pepper



1. Bring potatoes, broth and water to a boil in a 3-quart saucepan over high heat. Reduce heat and simmer until potatoes are tender, 12 to 15 minutes. Set aside.
2. While potatoes cook heat oil in a 10-inch nonstick skillet over medium-high heat. When hot, add cabbage and onion. Cook 10 minutes, stirring occasionally. Add sausage and continue to cook and stir occasionally 10 minutes longer until cabbage, onion and sausage begin to brown. Add shredded carrots and remove from heat.
3. Use a slotted spoon to transfer ¾ cup of cooked potatoes to skillet. Blend remaining potatoes and liquid in a blender until smooth. Return blended potatoes to saucepan. Add sausage/cabbage mixture to saucepan. Stir in milk. Bring soup to a simmer. Season with pepper.

Serves 4.

Nutrition Facts	
Servings per recipe: 4 (about 1-1/2 cup)	
Calories 340	Calories from fat 117
	% Daily Value
Total Fat 13g	34%
Saturated Fat 2g	11%
Cholesterol 39	13%
Sodium 788mg	33%
Carbohydrate 39g	13%
Dietary Fiber 5g	20%
Protein 18g	37%

Vitamin A: 104%	Vitamin C: 93%	Folacin: 16%
Calcium: 11%	Iron: 16%	Potassium: 38%

Modified from original source: <http://www.potatogoodness.com>
 Barbara Brown, Food Specialist, Oklahoma Cooperative Extension Service

9/09

Please contact your local Oklahoma Cooperative Extension Service Office for more educational information on garden-related topics. If you need further information about this week's show, call (405) 744-5404 or visit our website <http://www.oklahomagardening.okstate.edu>. Thank you for your continued support!

Sincerely,
 Kim Rebek
 Oklahoma Gardening Host

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Oklahoma Gardening Information Sheet (#3612)
OETA air date: September 19 and 20, 2009
 OETA airtime: Saturday 11:00 a.m., Sunday 3:30 p.m.

Cleveland County Master Gardener Demonstration Gardens – In this episode we visit the Demonstration and Teaching Gardens of the Cleveland County Master Gardeners. Jim McDaniel shares with us the background on the gardens, which were established in 2000. Since that time they have added a number of theme gardens, including the butterfly, xeriscape and Oklahoma Proven gardens. We also look at the special handicap accessible demonstration area. Each year as they expand the gardens, the master gardeners document their work in a how-to demonstration DVD as a resource for the public. The gardens serve as a resource for the community and are used by gardeners of all ages. The Master Gardeners offer a variety of classes and workshops throughout the year using the gardens as a classroom.

Theresa January, President of the Cleveland County Master Gardener Association, shares with us the many food production demonstrations in the gardens. They grow everything from peanuts to figs in the gardens, and demonstrate a variety of techniques, including square-foot gardening. All of the produce grown in the demonstration gardens is donated to Food for Friends, a non-profit organization that helps feed the hungry.

A large area of the gardens is dedicated to Native American crops. Fred Schneider, a Master Gardener and retired anthropologist has brought his passion for ethnobotany to root in this garden. Fred maintains heritage varieties of crops used by Native Americans and helps to preserve the seeds of crops like the 'Omaha' pumpkin (*Curcubita pepo*) so that they do not disappear. His crops include what he refers to as the Three Sisters, and their Big Brother: corn, beans, squash and sunflowers. We also look at his use of buckwheat (*Fagopyrum esculentum*) as a cover crop. The Native American gardens also include a demonstration of a drying rack, once used to preserve squash and pumpkins for the winter months. The garden houses a series of beds displaying native Oklahoma plants that were used by Native Americans, including Prairie Dog Bane (*Apocynum cannabinum*) a plant used to make the strings of a bow.

Plants at the gardens include Desert Willow (*Chilopsis linearis* 'Monbews'), Russian Sage (*Perovskia atriplicifolia*), Autumn Sage (*Salvia gregii*), Yarrow (*Achillea millefolium*), Buffalograss (*Buchloe dactyloides*), Red Yucca (*Hesperaloe parviflora*), Bearded Iris (*Iris germanica*), Floribunda Rose (*Rosa* species), Texas Fig (*Ficus carica* 'Brown Turkey'), and Tropical Milkweed (*Asclepias curassavica*).

Fall Fruit Compote

- 2 cups water
- 3/4 cup dried apricots
- 3/4 cup dried plum or prunes
- 1/2 cup dried apples
- 1/2 cup dried cranberries
- 1/2 teaspoon ground cinnamon
- 1/4 teaspoon ground cloves
- 1/4 teaspoon salt
- Up to 1/2 cup sugar



1. Combine water, dried fruit, spices and salt in a large saucepan over medium-high heat. Bring to a simmer. Cover, reduce heat and simmer 15-20 minutes or until fruit is tender.
2. Gently stir in sugar to taste and simmer, uncovered, about 10 minutes or until thickened. Serve warm, at room temperature or cold.

Serving Ideas: Serve as a side dish with breakfast or with roast pork or as a sauce over angel food cake. Serves 6.

Nutrition Facts (with 1/2 cup sugar)		
Servings per recipe: 6		
Calories 202		
	% Daily Value	
Total Fat trace		1%
Saturated Fat	trace	0%
Cholesterol 0mg		0%
Sodium 101mg		4%
Carbohydrate 53g		18%
Dietary Fiber	4g	17%
Protein 1g		2%
Vitamin A: 32%	Vitamin C: 2%	Folacin: 1%
Calcium: 3%	Iron: 8%	Potassium: 12%

Please contact your local Oklahoma Cooperative Extension Service Office for more educational information on garden-related topics. If you need further information about this week's show, call (405) 744-5404 or visit our website <http://www.oklahomagardening.okstate.edu>. Thank you for your continued support!

Sincerely,
Kim Rebek
Oklahoma Gardening Host

Oklahoma Gardening Information Sheet (#3611)

OETA air date: September 12 and 13, 2009

OETA airtime: Saturday 11:00 a.m., Sunday 3:30 p.m.

Pine Wood Nematode – In this segment Kim is joined by OSU Statewide Extension Specialist Dr. Damon Smith, Assistant Professor of Plant Pathology in Turfgrass and Horticultural Crops, and Jen Olson, Plant Disease Diagnostician for OSU's Plant Disease and Insect Diagnostics Laboratory to take a look at a very serious disease of pines called pine wilt. The disease is caused by the pine wood nematode (*Bursaphelenchus xylophilus*). Interestingly, the nematode is dependent upon another organism, the pine sawyer beetle (*Ergates spiculatus*), which carries the pine wood nematode from infected trees to healthy trees, thus spreading the disease. Pine wilt disease affects a variety of pine species, though the exotic pines, such as Austrian, Scotch, and Japanese black and red pine tend to be more susceptible to the disease. Stressed trees are more susceptible to both insect and disease infestation, therefore, keeping trees well-watered, particularly in times of drought, will help to protect trees against infection.

The nematodes feed within the resin canals and disrupt the flow of water through the tree. Wilting symptoms begin to appear and within a few weeks the tree dies. The disease is typified by the rapid death of the pine tree. If the wood is cut from these trees, the wood will be dry and no pitch flow will be noted. Trees suffering from pine wilt tend to hold their dead needles rather than drop them. The dead needles will point toward the ground, a symptom very characteristic of pine wilt.

If you have a pine tree that died rapidly, it is important to submit samples to the Plant Disease Diagnostic Laboratory for analysis. Rapid removal of these trees may slow the spread of the disease and reduce its severity. Proper sampling is crucial to identifying the pest problem. Cut a sample at least one inch thick from a branch that is connected to the trunk. If the tree is still living, look for a limb that contains both living and dead needles. If you have already cut down the tree, you can also submit cross section (disc) cut from the trunk.

Infested trees need to be burned before the following spring to kill the beetles prior to emergence. Do not use the infected tree for firewood unless it is all burned before spring. Do not move any firewood cut from an infected pine to another area of the state, as this could spread the disease.

Ornamental Grasses: Miscanthus Cultivars – This week in our Blades and Plumes Garden we are looking at cultivars in the species *Miscanthus sinensis*. Miscanthus grasses are native to eastern Asia, and are used extensively as an ornamental. Over 50 cultivars are available commercially, some of which have been popular in the garden for over 100 years. In some areas of the United States, species or wild types of Miscanthus have become invasive in natural habitats, but these are not the same as the ornamental cultivars used in the landscape. In general, the variegated forms of Miscanthus do not seed as readily and are less aggressive than all green forms. The best practice with any plant that poses a risk of escaping the garden is to watch nearby gardens for seedlings. If you find a particular cultivar is setting seed in the landscape, it is wise to remove and destroy the plant and replace it with a different cultivar or species. Other recommendations for responsible use of Miscanthus grasses in the landscape include purchasing only named cultivars, never purchase or plant the species or wild type Miscanthus, and consider planting native grasses if you live near a natural area.

Miscanthus is a garden favorite for its graceful, arching blades and the large, showy flower plumes, which appear from August through October. It is a clump forming grass that performs best in full sun.

The many cultivars range in size from just two feet up to about six or eight feet tall with flower spikes.

The first cultivar we are going to look at is called 'Morning Light'. The main difference between the cultivars we are looking at is the variegation pattern. 'Morning Light' is noted for its very narrow green leaves with white variegation along the leaf margins. This gives the foliage a silvery appearance. 'Morning Light' is a very versatile grass that can be used as an accent or planted en masse. It reaches about 4 to 6 feet in height and the fine textured blades tend to stay very upright.

The variegation on the cultivar called 'Zebrinus' is horizontal rather than vertical, creating a banded appearance and giving rise to the common name zebra grass. The dark green leaves with golden yellow bands have a striking appearance making this a popular garden cultivar.

The cultivar called 'Rigoletto' has very similar variegation to 'Variegatus' but tends to grow slightly shorter and more erect. It also has fewer tendencies to flop over in late summer. It is still a rather large grass with the blades reaching 4 to 5 feet.

'Adagio' is a dwarf Miscanthus cultivar, at 2 to 3 feet it is one of the shortest cultivars available. It sports extremely narrow, silver-gray blades which turn yellow in fall. Because of its compact form, 'Adagio' is useful in smaller gardens. It also makes an attractive tall ground cover, and like the other Miscanthus cultivars it works well in a mixed bed or border.

'Gold Bar' is another Miscanthus cultivar with horizontal banding on the foliage. It has a strong upright, dense growth habit. It seems to be a slow grower, while it is reported as growing up to 4 to 5 feet ours have never stretched much beyond 3 feet in the garden. It will take some time to reach its full size. On the other hand, the compact form makes this Miscanthus a great selection for growing in containers. Most notably, though it is the bold coloration that makes this 'Gold Bar' stand out.

All of these Miscanthus cultivars are very easy to grow. They tolerate a wide range of soils conditions, including heavy clays, and are also tolerant of heat and humidity. The beautiful plumes and foliage should be left standing throughout the winter for visual interest and to provide protection for the crowns. Cut foliage to the ground in late winter just before new shoots appear.

Oklahoma Proven with David Hillock – In this segment Assistant Extension Specialist David Hillock joins us to present this year's Oklahoma Proven plants. Oklahoma Proven is a plant evaluation and promotion program that began in 1999 at Oklahoma State University. The program is designed to help gardeners select plants, trees and shrubs that will grow well in Oklahoma's diverse climate. Plants chosen as Oklahoma Proven winners have demonstrated the ability to perform well with minimal inputs. Plants are nominated for the program by horticulturalists, nurserymen, and other growers from across the state. Each spring the executive committee selects four new plants to be the year's Oklahoma Proven selections including a tree, shrub or vine, perennial and annual. Here are this year's selections:

Arizona Cypress, *Cupressus arizonica*

Arizona cypress is a drought tolerant, evergreen tree native to the southwestern United States. In the landscape it usually reaches a height of only 20' to 25' and 15' wide. The foliage can be a gray-green but usually blue-foliage and recently yellow-foliage forms are available in the trade. 'Blue Ice' and 'Carolina Sapphire' are common cultivars and 'Cooke's Peak' is a selection from Cooke's Peak, New Mexico with silvery-blue foliage and pyramidal form (see photograph). Arizona cypress require well-drained soil and thrive in hot, dry environments. As the tree ages, the bark exfoliates beautifully becoming mottled with patches of burnt orange and green.

- Exposure: Full sun
- Soil: Well-drained

- Hardiness: USDA Zone 7

Chokeberry, *Aronia*

There are two species in the genus *Aronia*, Red Chokeberry (*Aronia arbutifolia*) and Black Chokeberry (*Aronia melanocarpa*), both excellent landscape plants. As their common names suggest, fruit color is the major difference between the two. They both produce clusters of white flowers in spring, have excellent red fall foliage, grow to about 10' high, and thrive in almost any soil type. 'Brilliantissima' is a popular cultivar of Red Chokeberry, chosen for its more compact size and abundance of red fruit. Both species are excellent wildlife plants but Black Chokeberry is getting a lot of attention as a "super fruit" for its high levels of antioxidants and can be used to make juice, jelly, or wine. *Aronia* work well massed in a naturalized setting or at the back of a border since the stems are usually bare near the base leaving room for garden perennials.

- Exposure: Sun to part shade
- Soil: Tolerant of most soils
- Hardiness: USDA Zone 4

Mexican Feather Grass, *Nassella tenuissima*

Mexican feather grass is a fine-textured clumping perennial that waves its silvery flowers in the slightest breeze. It is drought tolerant and tough despite its refined appearance and forms a clump almost two feet tall and three feet wide as the leaves arch to the sides. It tolerates a wide variety of conditions but prefers well-drained soils and it does not like to be cut to the ground in spring like other grasses. Remove only the top third of the plant to rejuvenate. It is native to prairies in Texas, New Mexico, and south to central Mexico and may reseed in the garden.

- Exposure: Full sun to part shade
- Soil: Well-drained
- Hardiness: USDA Zone 7

Diamond Frost® Euphorbia, *Euphorbia* 'Inneuphdia'

Diamond Frost® Euphorbia is a fine-textured mounding plant used as an annual in Oklahoma. The simple white flowers bloom from spring until first frost and the plant forms a 2' to 3' sphere. Diamond Frost® can be used as a mass planting, alone in a container, or mixed with almost any other plant. Its fine sprays of foliage and flowers will weave through other plants making it a perfect complement for almost anything from poinsettias to petunias. It is an excellent background plant, filler, or specimen, proving to be an extremely beautiful and versatile new introduction.

- Exposure: Full sun to part shade
- Soil: Moist, well-drained
- Hardiness: Use as an annual

Cooking with Barbara – Barbara Brown, Extension Food Specialist, makes a taco salad.

Taco Salad

- 4 8-inch flour tortillas
- 1 pound ground turkey
- 1 tablespoon chili powder
- 1 14-ounce can red kidney beans, rinsed and well drained
- 1/2 cup salsa
- 4 cups shredded lettuce
- 1/2 cup shredded reduced fat cheese
- 1 large tomato, chopped



- Optional topping ingredients: additional salsa, diced green pepper, sliced green onions, sliced radishes, diced avocado, sliced black olives, fat free sour cream, light ranch dressing
1. Preheat oven to 425°F. Tear 4 large sheets of aluminum foil. Crumple each sheet into a 3-inch diameter ball and place on a baking sheet. Cover each ball with a tortilla. Spray tortillas with nonstick cooking spray. Bake 6 to 8 minutes, until golden brown.
 2. In large skillet brown meat, breaking it into crumbles as it cooks. Drain well. Stir in chili powder, beans and salsa. Heat through.
 3. Divide lettuce between tortilla shells. Top with meat, cheese and chopped tomato.
 4. Serve with desired optional topping ingredients.

Serves 4.

Nutrition Facts (does not include optional toppings)		
Servings per recipe: 4		
Calories 500	Calories from fat 135	
	% Daily Value	
Total Fat 15g	23%	
Saturated Fat 4g	19%	
Cholesterol 93mg	31%	
Sodium 613mg	26%	
Carbohydrate 55g	18%	
Dietary Fiber 9g	36%	
Protein 38g	76%	
Vitamin A: 45%	Vitamin C: 43%	Folacin: 45%
Calcium: 16%	Iron: 39%	Potassium: 29%

Barbara Brown, Food Specialist, Oklahoma Cooperative Extension Service

8/09

This Week in the Vegetable Garden – We are planting radishes, spinach and turnips. When selecting crops for your fall vegetable garden, be sure to look for varieties that have the shortest maturation time. This will ensure your crop develops before the cold weather sets in. For vegetables that do not store well, like lettuce, spread your harvest out over a longer period of time by planting in succession. Sow a quarter of your seed each week for four weeks. That way, you will have fresh lettuce for a longer period of time.

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Sincerely,
 Kim Rebek
 Oklahoma Gardening Host

Oklahoma Gardening Information Sheet (#3610)

OETA air date: September 5 and 6, 2009

OETA airtime: Saturday 11:00 a.m., Sunday 3:30 p.m.

Ornamental Grasses with Blue Foliage – In this segment we look at grasses with blue-tinted foliage in our Blades and Plumes Garden. These grasses can add a great deal of interest to an area and some of them make quite a focal point. The bluest of them all is the Lyme Grass (*Leymus arenarius*) cultivar called ‘Blue Dune’. It has remarkable color and holds its color year-round. The plant reaches 2 to 3 feet in height and can spread considerably by underground stems called rhizomes. In fact, in some areas of the country Lyme Grass is considered invasive, particularly in the sand dunes around the Great Lakes. Lyme Grass does not seem to be a problem in Oklahoma and other southern states, possibly because it tends to slow down in the heat. However, it is very heat tolerant and drought tolerant. We have taken extra precautions to contain the grass by planting it in a bottomless tub.

Blue Love Grass (*Eragrostis elliottii*) – This grass is not as intense in color, but has a delightful, airy texture. Blue Love Grass is native to the southeastern states and is a great addition to a sunny perennial bed or border. The plant flowers in May and holds its delicate seed heads well into winter, offering year-round interest. It forms a graceful 3 foot by 3 foot clump and looks wonderful planted in mass or planted to provide contrast in a mixed bed.

We also feature a Blue Fescue (*Fescue ovina glauca*) cultivar called ‘Elijah Blue’. The plant is very compact, forming a mound 8 to 12 inches in diameter. The foliage of this grass is also evergreen, though some browning may occur in the winter. Its small size makes it suitable for edging a bed or border, and it also makes a nice ground cover when planted en masse. The plant is often considered to be a short lived perennial as portions of the clump die out, but this can be corrected through periodic division. ‘Elijah Blue’ is drought tolerant and makes a great addition to the rock garden. It is also deer resistant.

One grass-like plant we have in our Blades and Plumes Garden is actually sedge, a close relative of the grasses. This is *Carex glauca* or Blue Sedge. It has a similar growth habitat as the Blue Fescue, with narrow, evergreen leaves forming a tight 8 to 12 inch mound. The Blue Sedge is a good choice for more shady sites where it can be used as a lovely groundcover. Blue Sedge prefers moist soils, but is fairly tolerant of a wide range of conditions and is even drought tolerant.

Switchgrass or *Panicum virgatum* is a native perennial prairie grass. It is quite adaptable and very tolerant of extreme weather conditions, it withstands drought, and tolerates heavy wind very well, as you might imagine considering it comes to us from the prairie. There are several cultivars available that have been selected for variable foliage and panicle colors. The cultivar we have here called ‘Heavy Metal’ was selected for its upright, metallic lavender-blue foliage and waxy white blooms. The flower head or panicle reaches about 109 inches in length and has an open, airy texture. The foliage turns bright yellow in the fall and the seed heads turn a dark burgundy color. ‘Heavy Metal’ is easy to grow; it tolerates a range of conditions. One cultural consideration with switchgrass is to avoid over-fertilizing.

Another prairie native with blue-tinted blades is Little Bluestem (*Schizachyrium scoparium*). The cultivar we are growing is called ‘The Blues’, and while the name of the grass is Little Bluestem, the word little is only in relation to Big Bluestem, which can reach heights of up to 10 feet. Little Bluestem plants, on the other hand, top out around four feet. ‘The Blues’ produces a dense clump of long, slender stems that take on a lavender-blue color through summer and turn a brilliant burgundy red in fall. We

have our Little Bluestem growing in a support ring, because we found that it had lodged some in the past. Too much water or fertilizer can cause plants to lodge or flop over, so be sure to set ‘The Blues’ in a well-drained site.

Pine Health in General – In this segment we join OSU Statewide Extension Specialists Dr. Damon Smith, Assistant Professor of Plant Pathology in Turfgrass and Horticultural Crops, and Dr. Eric Rebeck, Assistant Professor of Entomology in Turfgrass and Ornamental Plants to look at pest problems in pine trees. Damon shows us examples of some very common fungal diseases found in pines, including diplodia tip blight and dothistroma needle blight. Eric takes a look at a very common form of damage to pine trees that is caused by a bird, not an insect. The bands of holes drilled in the tree trunks by the yellow-bellied sapsucker are often confused for insect damage. Many wood-boring beetles produce holes of a similar size in the tree bark as they leave the tree to mate. However, the holes produced by wood-boring insects are generally single and appear randomly across the trunks surface. Sapsuckers drill straight lines of holes in to the tree trunk as they feed. In addition to beetle damage, other insects that cause problems on pines include the pine needle scale, aphids, the Nantucket tip moth, and pine sawflies. Many pest problems occur when pine trees are under environmental stress. Trees that suffer from water stress or nutrient deficiencies are more susceptible to pathogens and insect pests. Proper irrigation, fertilization and pH management can help reduce tree susceptibility to pest problems. OSU Extension Fact Sheet EPP-7618 contains more information on common disease problems in pines and other conifers (<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2313/EPP-7618web%20color.pdf>). For more information on insect pests of pines, look at Fact Sheet EPP-7164 (<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1304/EPP-7164web.pdf>).

Plant Disease and Insect Diagnostic Laboratory (PDIDL) – In this segment we are joined by Jen Olson, Plant Disease Diagnostician for OSU’s Plant Disease and Insect Diagnostics Lab, commonly referred to as PDIDL. The PDIDL is a service of the Oklahoma Cooperative Extension Service. The primary goal of the PDIDL is to provide residents in the State of Oklahoma with both accurate diagnoses of plant diseases and insect pests and recommendations for their control. The PDIDL operates throughout the year to provide plant disease and insect identification services to extension educators, individuals, consultants, and commercial producers. The PDIDL strives to provide both accurate and timely diagnosis of the samples received. All samples received in the lab are examined for plant disease based on symptoms and the presence or absence of pathogens (microorganisms that cause disease). Diagnostic replies are sent by mail and include a diagnosis, recommendations for control, and supplemental information when available. The following outlines the proper steps to follow in collect plant and soil samples.

Collecting plant samples:

- Collect several plant specimens showing various stages of disease development. Select plants that are still alive.
- Collect the entire plant whenever possible. Plants should be dug (not pulled) to keep the roots intact.
- For tree samples, the branches sent in should be at least 8 inches long.

Plant sample packaging:

- Wrap the roots of the plant in a plastic bag so that they do not dry out. If the plant is already potted then it can be left in the pot for shipping.
- Wrap the entire sample in plant bags to keep it from drying out (exceptions: wrap fleshy fruits beginning to decay and mushrooms in newspaper).
- Place the plant in a sturdy box or mailing tube. Do not add water or wet paper towels.
- Send a detailed history explaining the disease symptoms, when disease began, name, address, and phone number.

Collecting soil samples:

- Take several soil samples in an area showing possible nematode damage. Collect the soil at a depth where the root concentration is the greatest (1-12 inches). Mix the samples from the area.
- Remove a single 1 pint sample for nematode analysis.

Soil sample packaging:

- Place soil in a non-vented plastic bag. Label the bag with collection date, location, and crop. Soil and plant samples should first be taken to your county Cooperative Extension Office for identification. Extension educators at your local office are trained to assist in identifying plant problems. In some cases, particularly with less common pests, the county educators may need assistance in identifying the cause of the problem. In this case, they will direct you toward the PDIDL.

Submitting a sample to PDIDL:

- Before submitting a sample, please complete a [Plant Disease or Insect Diagnostic Request Form](#) and submit it with the sample.
- Mail first class in a sturdy box or take it to your county Cooperative Extension Office to have it shipped.
- Submit sample and form to:
Plant Disease and Insect Diagnostic Laboratory
Entomology and Plant Pathology
Oklahoma State University
127 NRC
Stillwater OK 74078-3033

This Week in the Vegetable Garden – We are visiting with OSU Vegetable Extension Specialist Lynn Brandenberger to learn about the Oklahoma Market Gardening School. This educational opportunity is offered through a unique collaboration between Oklahoma State University, Samuel Roberts Noble Foundation, Kerr Center for Sustainable Agriculture, and Oklahoma Department of Agriculture, Food & Forestry. The goal of the program is to familiarize current and future fresh market producers with management, production, and marketing techniques for fresh produce. This eight week course is offered Tuesdays from September 22 through November 10. For more information visit: <http://www.hortla.okstate.edu/pdf/okmgs.pdf>.

Please contact your local Oklahoma Cooperative Extension Service Office for more educational information on garden-related topics. If you need further information about this week's show, call (405) 744-5404 or visit our website <http://www.oklahomagardening.okstate.edu>. Thank you for your continued support!

Sincerely,
Kim Rebek
Oklahoma Gardening Host