

Horticulture Tips

May 2009

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

GARDEN TIPS FOR MAY!

David Hillock

Trees and Shrubs

- Prune and feed azaleas immediately after blooming.
- Insect Alert: ([EPP-7306](#))
 - * Bagworms on juniper and arborvitae. (Late May)
 - * Elm leaf beetles and larvae on elms. (Late May)
 - * Mimosa webworms on mimosa and honeylocust.
 - * Lace bugs on sycamore, pyracantha and azalea.
- Soak new transplants and newly planted trees unless rainfall is abundant.
- Pine needle disease treatments are needed in mid-May. ([EPP-7618](#))

Turfgrass

- Cool-season lawns can be fertilized again. If you did not fertilize cool-season grasses in March and April, do so now.
- Warm-season lawns may be fertilized again in May. ([HLA-6420](#))
- Seeding of warm-season grasses such as bermudagrass, buffalograss, zoysiagrass and centipedegrass is best performed in mid-May through the end of June. The soil temperatures are warm enough for germination and adequate growing season is present to promote winter hardiness.
- Dollar spot disease of lawns can first become visible in mid-May. Make certain fertilizer applications have been adequate before ever applying a fungicide. ([EPP-7658](#))
- Nutsedge plants become visible during this month. Post-emergent treatments are best applied for the first time this month ([HLA-6421](#)). Make certain warm-season grasses have completed green-up.
- The second application of pre-emergent annual grass herbicides can be applied in late-May or early June, depending upon timing of first application ([HLA-6421](#)). Check label for details.
- Vegetative establishment of warm-season grasses can continue. ([HLA-6419](#))

Flowers

- Annual bedding plants can be set out for summer color.
- Plant summer bulbs such as cannas, dahlias, elephant ear, caladiums and gladiolus.
- Shake a leaf over white paper to look for spider mites. If the tiny specks begin to crawl, mites are present.

Water Gardens

- Clean out water garden and prepare for season. Divide and repot water garden plants.

- Begin feeding fish when water temperatures are over 50°F.

Fruits and Vegetables

- Plant watermelon, cantaloupe, cucumber, eggplant, okra, sweet potatoes, etc.
- Fruit spray programs should be faithfully continued during the next several weeks. ([EPP-7319](#)).
- Late May is the best time to control borers in the orchard. Check for label recommendations and controls.

Pecan Nut Casebearer is Coming

Eric T. Stafne, Phillip G. Mulder, Jr. and Richard Grantham

May is traditionally the time when pecan producers get worked up about Pecan Nut Casebearer (PNC). PNC can cause significant damage if uncontrolled. Some producers may decide to utilize the crop loss from PNC as a natural thinning technique. Although a nice idea in theory, what if the PNC takes 60% of the crop instead of 30%? Hence the dilemma: to control or not to control. I advocate monitoring as a way to keep on top of PNC.

In Oklahoma, the pecan nut casebearer completes two to three generations per year. Overwintering larvae develop into moths that emerge from late May to early June. After tree pollination, female casebearer moths begin laying eggs on pecan nuts. These eggs result in first-generation larvae that feed on pecan nuts and generally cause the most damage. Second-generation PNC begin appearing in mid-July. Larvae feed primarily on pecan shucks. Little damage is created from second-generation larvae. Third-generation PNC hatch 30 to 40 days later and feed for a short time (if they feed at all) on shucks. Each small larva forms a tightly woven, protective silken case (hibernaculum) near a bud or leaf scar for overwintering. These larvae emerge from hibernacula in the spring and feed by tunneling into shoots. Pupation of the overwintering generation occurs in these tunnels formed from feeding, and adults emerge the following spring to deposit the first generation of eggs on pecan nuts.

Egg-laying by PNC begins around the end of May in the southern counties of Oklahoma and ranges to June 15 in northern parts of the state. In central Oklahoma, egg deposition usually begins around June 4 or 5, depending on weather conditions. Excessive rainfall or cold temperatures may delay development of the overwintering generation. Scouting for PNC eggs should begin one to two weeks before nut entry by larvae. This requires looking for eggs on the nuts and using a hand lens to determine the maturity of eggs. To determine infestation levels, nut clusters should be examined. A cluster is infested if any eggs are found or evidence of larval entry is observed. Examine 10 nut clusters per tree across several trees. If 2 or more clusters are infested before 310 clusters have been examined, an insecticide application should be made as soon as possible. If less than two clusters are found infested, sampling should be repeated in two to three days. Nut clusters with eggs should be tagged with a ribbon or tape and checked daily to determine egg maturity. Insecticides should be applied within one to two days after the eggs hatch.

Pheromone-baited traps for PNC are available. The pheromone mimics the chemical emitted by female casebearer moths and attracts males to a sticky trap. Trap captures can be used to detect

the arrival of PNC into an area, aid the grower in estimating population numbers, and provide a signal of when first significant nut entry by larvae may occur.

Simulation models are useful tools for predicting biological events, especially in the absence of raw data or continuous monitoring of the event. In this instance, the seasonal activity of overwintering and first summer generation PNC can be predicted by using a degree-day based model (heat units). Degree-day models rely on the fact that insect development is temperature dependent and does not occur below a threshold point or base temperature. The base temperature then becomes an important component of the model, along with the daily high and low temperatures. The models compute degree-days by averaging the high and low temperature and subtracting the base temperature. This model is not constructed to determine population density of PNC, but generates a date that tells growers when they should begin scouting for PNC in order to time control measures.

Oklahoma State University has refined a weather-based model for anticipating damage by PNC. This model incorporates weather data from 115 automated Mesonet stations located throughout Oklahoma. Degree-days are accumulated from a unique date that is based on the climatological (30-year) average of annual frost-free (32°F) days at that site. According to the model, a degree-day total of 1831 indicates the day of first significant nut entry by PNC. As degree days accumulate for each site, the model automatically makes recommendations for three important events:

- At 1000 degree-days - Hang pheromone traps and monitor for adults.
- At 1500 degree-days - Begin scouting for PNC eggs.
- At 1600 degree-days - Begin scouting for PNC larvae and/or damage.

The model is available for growers to obtain site-specific information. During this period, model accuracy has been excellent; however, growers should not rely only on model predictions. The model, as well as the pheromone traps, represents useful predictive tools; however, they should not replace the necessity of good scouting, but simply supplement an effective pest management program.

For further information see the links below.

The PNC predictive model is located at:

<http://agweather.mesonet.org/index.php/data/section/hort>

Click on the Pecan section and finally the area marked “pecan casebearer model.”

EPP-7189 The Pecan Nut Casebearer:

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1314/F-7189web+color.pdf>

CR-6209 Commercial Pecan Insect and Disease Control:

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1330/CR-6209web.pdf>

How Long Should I Water my Lawn?

Justin Quetone Moss

Homeowners often wonder how long they should irrigate their lawns, but the volume of applied irrigation water cannot be directly measured in units of time. However, one can estimate how much irrigation water is applied to their lawn over time by following a few simple steps.

1. Purchase a few short, plastic rain gauges from a local lawn and garden retail store.
2. Strategically place the rain gauges approximately at turfgrass mowing height throughout the irrigated turfgrass areas in the lawn.
3. Early in the morning, irrigate the lawn for exactly 20 minutes on a relatively non-windy day.
4. After irrigating for 20 minutes, measure the volume of water in each rain gauge and calculate the average volume over 20 minutes, then multiply by 3 to calculate the average volume over one hour.
5. Move the rain gauges to different areas/zones of the lawn and repeat the process as needed.
6. After completing this process, you will have a very good estimate of average irrigation output in inches per hour for your lawn.

Assume you complete this process and determine that your irrigation system delivers 0.5 inches of water per hour. Assuming you water three times per week for 20 minutes, then your weekly irrigation output would be 0.5 inches of water per week. For more information about lawn irrigation scheduling, visit the Oklahoma Mesonet SIP website at <http://sip.mesonet.org/>. Now that you know the output of your irrigation system, you can use the SIP website to determine the daily and weekly irrigation requirements for your lawn. In addition, many companies now have “smart” lawn irrigation controllers that have automatic rain “shut-off” sensors and capabilities to connect to local weather stations to help you determine your lawn irrigation needs. For further information, contact your local OSU Cooperative Extension Service Office.

Vegetables and Adverse Environmental Conditions

Jim Shrefler

Considering the roller coaster-like nature of weather patterns experienced in Oklahoma the past several years, most people are probably not sure how to describe what an “average” spring is like. This year is no exception, with temperatures in the 80s one day and near freezing a day later, plenty of wind, and prolonged periods of relatively dry conditions in many parts of the state. In order for vegetable growers and gardeners to make the best possible management decisions when faced with such conditions it is important to understand how these conditions can affect vegetable plants. Obviously, all vegetables are not affected to the same degree by these various environmental conditions. However, weather and environmental conditions certainly do influence the performance of all vegetables in one way or another.

One factor for which a better understanding would probably benefit many gardeners is the importance of soil temperature on seed germination, emergence and transplant establishment. In

general, for any given plant species, below and above certain temperatures no seed germination will occur. This should be fairly easy to understand and accept. However, probably less understood, is the fact that the average time required for emergence can vary greatly within the ranged of temperatures at which germination will occur. For example, snap bean emergence following planting is 16 days at 59°F and 6 days at 86°F. That means there's about 10 more days the grower will wait before knowing if the crop will grow. It also means that there is a longer time period during which a fungus or insect could choose to dine on your seed before it germinates and emerges. This is why planting at suboptimal temperatures typically results in poor and irregular crop stands. With cool-season crops, for which early spring establishment is necessary, there may be no choice other than planting before soil temperatures reach an optimum level for rapid germination. However, it may be possible to speed up germination at this time by covering the soil with clear plastic after planting seeds. The plastic should be removed once seedling emergence occurs. For warm-season crops that are direct seeded, the best choice is probably to wait until soil has warmed to a suitable temperature for rapid and uniform germination. For cucurbit crops, for example, direct seeding in cool soils not only results in slow germination but also results in slow early development of plants. Two options for getting these plants started quicker are: 1. Use black plastic mulch or landscape fabric to warm the soil and enhance early plant growth. (Zucchini squash planted in early May in southeast Oklahoma consistently produces earlier and has greater yields than when planted on bare soil.) 2. Wait until the soil warms up to plant. Watermelon direct seeded in early May is typically slow to germinate and emerge and early plant growth is often very sluggish. When planted in late May, germination is quick and plant growth is vigorous. Although early watermelon crops can be achieved using transplants and black plastic mulch, these practices add considerably to production costs.

Soil temperature is just one the various factors that influence early crop plant establishment. One way to get around the soil temperature and seed germination issue is to plant seeds in protected areas and place them in the field as transplants. However, just because seeds have germinated does not mean that temperature is not an important factor for good plant growth. In fact, temperature can influence the growth of established plants in several ways. In general, plant growth will be slower with cooler temperatures. An even greater concern should be that prolonged cool temperatures, even though freeze or frost does not occur, may cause chilling injury. This type of injury affects harvested produce such as okra and cucumber. It also can affect young plants. While it may not kill plants it can delay development. Some plants affected include tomato and cucurbits. Cucumber is one of the more susceptible plants to chilling which causes discolored leaves. See an example observed in 2006 at: <http://www.ento.okstate.edu/Pddl/2006/PDIA5-9.pdf>.

Finally, the windy conditions that vegetables can be exposed to are another source of potential injury. Dry soils combined with strong winds can essentially cause sandblasting of plants. Depending on the severity, this can cause severe damage and loss of the crop stand. One way to protect crops from wind injury is to use windbreaks. Depending on the planting size, windbreaks may be constructed with various materials or may be produced by planting a cover crop such as wheat which is left standing between the crop rows. This is commonly used in crops such as watermelon in Oklahoma. See an example at http://www.lane-ag.org/wm-world/Cucurbit_Manual/e-853.html. This outlines some of the environmental hazards that

vegetable growers can face in the springtime. Developing an awareness for these hazards, combined with proper planning that includes taking measures to protect crops, should help the grower to prepare better for future spring planting seasons.

Souvenirs You Shouldn't Bring Back from Vacation

Shelley Mitchell, Extension Associate, 4H/Youth

People often bring mementos home from vacation, but some keepsakes are best left behind. Living organisms, whether plant or animal, do not make good souvenirs. When an organism gets introduced to a new habitat, such as your lawn or garden, it does not usually have natural predators to control its population. It may grow out of control, spreading throughout an area quickly and using resources that would otherwise be used by native species.

People have been introducing species to new habitats since the first humans migrated. Travelers often took seeds or plants on their journeys to eat, trade or plant when they resettled in new places. Many of our crop and livestock species arrived this way, brought over from Europe with the early settlers. These plants and animals are 'introduced species'--they are not native to the United States--but they are not 'invasive'. We don't have problems with large flocks of chickens running rampant down Main Street or apple trees choking out other vegetation over thousands of acres.

Invasive species are introduced species that are a threat to the natural environment because they have traits that allow them to out-compete the local species. The newcomers may reproduce faster than the native species, crowding them out or the plants may taste bad to animals or be difficult to eat, preventing population control. The invasive species become more numerous, filling the niches of the native species and reducing their numbers substantially. Researchers at Cornell University estimate that 42% of our threatened and endangered species are in that situation because of introduced species.

One invasive species is kudzu. Kudzu is a vine that was brought to the U.S. from Japan in the mid-1930s and planted in the southeastern states for erosion control. In addition to spreading along the ground, kudzu climbs up trees, telephone poles, and buildings. Kudzu grows about a foot *a day*, blocking sunlight for native plants, weighing trees down until they break, and killing trees by girdling them. It is hard to control, and has now spread north to New York and west to Oklahoma. Another invasive pest was introduced to the U.S. with the arrival of the first Asian chestnut tree. That tree, brought to America for a New York City zoo, had a fungus spread by wind that decimated most of the American chestnut trees within a few decades. Two of the most common birds in the U.S., house sparrows and starlings, were introduced into the U.S. in the 1800s. Originally, 100 house sparrows and 60 starlings were introduced in New York City. Now they vastly outnumber native birds across the country.

To prevent similar tragedies and safeguard our natural resources as well as our food supply, the U.S. uses agricultural specialists and detector dogs to monitor imports and exports of plant and animal products at international airports, border crossings, and international postal facilities. They examine all luggage, containers and even wooden pallets for pest species. In addition to

preventing pest importation by tourists, inspectors aim to thwart any attempts at agro-terrorism. Even within the U.S., there are regulations regarding the transport of plants and other agricultural products, to stop the spread of pests and diseases in our country.

You can help stop invasive species from hurting our food supply and natural resources. Do not bring unapproved living organisms into the country, and check regulations before moving plants or animals between states. You can find more information about the regulations of imports and exports here: http://www.aphis.usda.gov/import_export/index.shtml

Culinary Herbs for Oklahoma Gardens

(Originally prepared by W. R. Kays)

Culinary herbs are plants grown for flavoring various kinds of foods. Many kinds are adapted to and grow successfully in Oklahoma gardens. The plants, in many instances, are ornamental and interesting to grow.

Frequently, the beginner plants far too much of individual kinds. Since very small amounts are used in most foods, plan on growing few plants of each kind not frequently used.

In many instances the flavors imparted by home grown herbs are stronger or more pungent than available commercial materials so use very small quantities until experienced.

The general culture of herb plants is quite similar to both vegetables and flowers. Suitable soil, mulching, irrigation, plant spacing and pest control should be followed. In the control of insects and diseases the gardener must recognize needed cautions regarding chemical residues on plant parts which will be harvested and used. Fact sheet [EPP-7313 Home Vegetable Garden Insect Pest Control](#), though not specific for herbs, may provide cautions as well as recommended treatments.

Herbs are classified with respect to their life span. Some are annuals and thus are grown from seed with the knowledge that portions will be harvested at the appropriate time. Usually mature seeds may be harvested and used for plantings in future years.

Other kinds are biennials, which suggest the plant will grow and produce during portions of two seasons. Seed production generally takes place only during the second year of growth. With carrot and caraway the usual flavoring substance used is the seed while with parsley it is the foliage. The seeds would be the product of the second growing season while the best parsley foliage for flavoring would be produced the first season.

Another group of herbs are perennials and may grow and produce several years from one planting. In several instances seeds are not produced so the grower may use bulbs, roots, rhizomes or cuttings to propagate more plants.

Harvesting and Storage

Those herbs used as leaves usually are more flavorful when harvested at or just before blooming. In such instances one may harvest portions of the stems with leaves and flowers or flower buds attached. Following thorough drying in locations with minimum sunlight to reduce the loss of color, materials may be stored in darkened areas in airtight containers or in containers in the food freezer.

Some herbs are available commercially as dry, rather finely ground or rubbed materials. For those who desire to grind or pulverize home processed materials, it is best to grind only small amounts rather than all as soon as dried. There may be a greater loss in aroma and flavor following prolonged storage after grinding.

Some Culinary Herbs

<u>Common Name</u>	<u>Scientific Name</u>	<u>Parts Used*</u>	<u>Flavoring For**</u>
<u>Annuals</u>			
Anise	<i>Pimpinella anisum</i>	S, L	B, S, M, Ms, Ga, Sa
Basil	<i>Ocimum basilicum</i>	S, L	S, St, M, Sa, Ms
Borage	<i>Borago officinalis</i>	L	G, Sa, P, S, St, V
Coriander	<i>Coriandrum sativum</i>	S	B, S, M, Ga
Dill	<i>Anethum graveolens</i>	S	P, Ms, M, Sa
Fennel	<i>Foeniculum dulce</i>	S, L	S, Ga, B
Garden cress	<i>Lepidium sativum</i>	L, Sp	Ga, Sa, M
Nasturtium	<i>Tropaeolum minus & majus</i>	L, Sp	Sa, S, D, M, St
Savory	<i>Satureja hortensis</i>	L	S, Sa, D, M
<u>Biennials</u>			
Carrot	<i>Daucus carota</i>	S	S, St, B, V, P, M, G
Caraway	<i>Carum carvi</i>	S, L	Ga, B, S, Sa, Ms
Parsley	<i>Petroselinum hortense</i>	L	Ga, S, Sa, St, V
<u>Perennials</u>			
Chives	<i>Allium schoenoprasum</i>	L, B	S, Sa, M, B, Ms
Garlic	<i>Allium sativum</i>	B	S, Sa, M, B, Ms
Horseradish	<i>Amoracia rusticana</i>	R	Ms, P
Lemon Balm	<i>Melissa officinalis</i>	L	S, M, St, Ms
Mints	<i>Mentha spp.</i>	L, Sp	Ga, Sa, M, Ms, P
Oregano	<i>Origanum vulgare</i>	L	S, M, St, Sa
Rosemary	<i>Rosmarinus officinalis</i>	L	M, Ms, St, S, D
Sage	<i>Salvia officinalis</i>	L	M, D, St
Tarragon	<i>Artemisia dracunculus</i>	L, Sp	Sa, Ms, V
Thyme	<i>Thymus vulgaris</i>	L, Sp	S, Sa, D, B, V, Ms

*Parts Used: B=Bulb; L=Leaves; R=Root; S=Seed; Sp=Sprig

**Flavoring For: B=Breads and Pastries; D=Dressings; G=Cooked Greens; Ga= Garnish; M=Meats; Ms=Meat Sauce; P=Pickles; S=Soups; Sa=Salads; St=Stews; V=Vegetables

Planning Points for Landscape Design

David Hillock

Designing your own landscape can be fun and rewarding, but to most, very challenging. However, there are many resources available to help guide you through the process if you choose to tackle it yourself. How-to books, text books, fact sheets and other publications exist at the library, bookstore or on the internet. Designs don't have to be complicated, but in some cases the topography or other unique situations may pose some difficult challenges and seem overwhelming; if this is the case it might be best to hire a professional.

In addition to the basic elements and principles of design, here are some more points to consider when designing a landscape.

1. Always start planning on paper. An eraser is always easier to use than a shovel. Make use of available references concerning home landscaping and plant materials.
2. Paths and driveways should be straight, direct routes, unless there is a good reason for them to be otherwise.
3. Trees should be used to frame the house and provide a background. They should never block or hide the house.
4. Play and utility areas should be located so they do not detract from the home.
5. Do not overplant – be sure you know the ultimate size of each plant and allow room for growth. Do not depend on heavy pruning to keep plants within desired size.
6. Confine specimen plants to the borders of the lawn area. The open lawn will look spacious and it's a lot easier to mow!
7. Be sure to observe scale in planting. Oversized shrubs can dwarf a small home.
8. Balance is important in landscaping. Do not arrange one area of the property with more color or more heavily planted than another area.
9. Create focal points or centers of interest. These focal points can be outstanding plants, pieces of tasteful statuary or a distant view. The entry is the normal focal point of the public area.
10. Statues, benches and water features can be used as focal points, but rarely does a small garden benefit from more than one. Choose them carefully.
11. In order to make people feel welcome, do not put large shrubs near the door. Use somewhat larger shrubs near the corners of the house and gradually taper plantings to lower shrubs near the door.
12. In general, do not depend on a foundation planting of perennials, annuals and roses in the front of the house. They are ineffective most of the year.
13. You don't have to hide the whole foundation of the house. Ground covers alone in spaces between shrubs will tie the planting together.
14. Use plants with highly colored foliage with care. Remember to blend contrast in texture carefully.
15. In general, plants with fine texture are better placed in the foreground; coarser materials with large leaves in the background.
16. Border plantings can be used alone or in conjunction with fences to define property lines and achieve the needed privacy.
17. When planning your landscape, do not overlook shrubs with outstanding winter coloring, branching habits or fruit. Plan for year-round effect.

18. Select plants that will grow well in the geographical area and under the management you will give them.
19. Planning should include the family, consider each members needs and desires. Also consider the changing uses of the areas as family members mature.
20. Take full advantage of plants and structures to modify temperature, wind and sunlight.
21. Consider additional water faucets and electrical outlets for added convenience.
22. Simplicity is the key to good design. Avoid cluttered plantings.
23. A flower or shrub bed in the middle of the lawn is not as attractive as one that is “tied in” with a fence, wall or mass of evergreens. A bed should be part of the overall design, not just “filler” added for color.
24. Use your imagination but be aware of legal limitations that might be imposed by local zoning laws.

2009 Lane Ag Center Annual Field Day

Jim Shrefler

The 2009 Lane Ag Center Annual Field Day will be held Saturday, June 13 from 9 a.m. to 3 p.m. The event is sponsored through the cooperation of Oklahoma State University’s Wes Watkins Agricultural Research and Extension Center and the USDA Agricultural Research Service. The event will offer a blend of educational activities, entertainment and relaxation for all who attend. All who attend will be able to participate in tours of research and demonstration projects that address the production of vegetables, herbs and alternative fuels crops. Some of these projects involve the use of organic production practices. Entertainment will include displays and demonstration of antique tractors and farm machinery and presentations by local performers. To round off the day, attendees will be able to enjoy some great local cooking while visiting with OSU friends, neighbors and research center staff. Finally, be sure to not leave before trying some fresh cold watermelon. The event is open to the public and there is no fee to attend.

The Lane Ag Center is located 10 miles east of Atoka on Highway 3. As more information becomes available it will be posted at our website at www.lane-ag.org For questions, call 580-889-7343 or send an email to jim.shrefler@okstate.edu

Master Gardener Corner

David Hillock

State Master Gardener Continuing Education Conference – June 5, 2009.

This year the Washington County Master Gardeners will host the State Master Gardener Continuing Education Conference. The theme for the conference is *Gardening at the Edge of the Prairie*. The conference will be held at the Tri County Technology Center in Bartlesville. The conference will include a keynote speaker, breakout sessions and a community gardens tour.

Dr. Alan Stevens will be our keynote speaker. Dr. Stevens is the Director of the K-State Horticulture Research Center in Olathe and leads the Extension Horticulture program for the State of Kansas. His research focuses on the evaluation of flowering plants for our always-

challenging transitional climate. Alan's research plots provide the basis for the "Prairie Star" (annuals) and "Prairie Bloom" (perennials) lists of star performers for our prairie climate and soils. Alan's speaking style imparts his knowledge in a form that is easy to understand and in a way that makes you want to sit and listen. Dr. Stevens will talk about considerations in planning and planting public display gardens.

Breakout session include: ***Kansas Plant Trials and Public Gardens***, Dr. Alan Stevens; ***All American Selection Trials – Confessions of an AAS Vegetable Judge***, Ms. Julia Laughlin, Associate Professor and Department Head of Horticulture at OSU-OKC; ***The Living Soil – Micro Animals and Pest Suppressors***, Dr. Carmen Greenwood, Assistant Professor and Undergraduate Coordinator, Department of Entomology and Plant Pathology, OSU Stillwater; ***How To Understand The Chemicals We Find on the Shelves of the Garden Centers***, Mr. Brian Jervis, OSU Extension, Tulsa; ***Go Easy – Go Native***, Ms. Maureen Turner, Chief Horticulturist, City of Tulsa; ***Vegetables: Putting More Food on the Table and in the Pantry***, Ms. Sue Gray, OSU Extension, Tulsa; ***High Level Tree Care***, Mr. Ken Preaus, Preaus Landscaping of Tulsa; ***Can This Tree Be Saved?***, Mr. Richard Bewely, AEP-PSO; ***Making an "IPM Master Plan" Furnish Your Tool Box or put your "Plan" into Action!***, Dr. Tom Royer, Professor of Entomology and Integrated Pest Management Coordinator, OSU Stillwater; ***Lawns, Lawn Problems & Diagnosing Them***, Dr. George Driever, OSU Extension.

Community Ornamental Garden Tour

The "sidewalk" beds at the Public Library and Price Tower (Frank Lloyd Wright's only skyscraper) are two Bartlesville gardens where Master Gardener's expertise and creativity meet the public! Come see and hear about the challenges and rewards of starting and maintaining plants in a public garden—where the gardener uses someone else's money—may have little control over the water—might have plants "borrowed", etc.. *The tours will be conducted rain or shine.* Please come prepared!

A preconference social will be at the Frank Phillips Mansion on Thursday evening from 6:00 – 8:00 p.m. for those who arrive early.

Registration will be \$40.00 and include lunch and all educational sessions and tours. The conference is open to all certified Master Gardeners. Program and registration forms will be mailed to all Master Gardeners soon!

Hope to see you all there! For more information contact David Hillock, Master Gardener Coordinator, Oklahoma State University, Department of Horticulture & Landscape Architecture, 358 Ag Hall, Stillwater, OK 74078; email: david.hillock@okstate.edu; phone: 405-744-5158.

Upcoming Horticulture Events

IPM Conference

May 21, 2009, OSU Botanical Garden, Stillwater

<http://www.hortla.okstate.edu/pdf/2009ipm.pdf>

Summer Gardenfest

June 13, 2009, OSU Botanical Garden/*Oklahoma Gardening*, Stillwater

For more information, please call Stephanie Larimer at 405-744-5404 or visit our website

<http://www.oklahomagardening.okstate.edu/okg/programs.htm>.

Tree Care Conference

October 28, 2009, OSU Botanical Garden, Stillwater

Global Horticulture

December 2, 2009, Stillwater

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