

# Horticulture Tips

## May 2012

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.

## **Lawn Fertilizer Spreader Calibration and Fertilizer Application**

*Justin Quetone Moss*

Proper fertilizer spreader calibration and application is important for producing a healthy lawn and to reduce potential environmental impact by fertilizer misapplication. Non-calibration and misapplication of lawn fertilizers may result in applying too much or not enough nutrients to the turfgrass area. Even when properly calibrated, misapplication of fertilizers can result in unsightly lawn areas (Figure 1). Although it is advised to conduct a complete fertilizer spreader calibration, the following tip can help homeowners properly apply fertilizer to turfgrass lawn areas without having to worry about weighing out fertilizers, measuring out test sites, or asking the nearest college or high school student for a mathematics refresher.

Figure 1. Example of uneven fertilizer distribution with a drop spreader.



1. The first step is to conduct a soil test of the lawn by contacting your local OSU Cooperative Extension Educator and/or following the guidelines in OSU Cooperative Extension Fact Sheet PSS-2207 and PSS-2225.

2. After completing the soil test, the simplest option for homeowners is to purchase a rotary fertilizer spreader (Figure 2) made by their favorite or preferred manufacturer. A drop spreader can be more precise and accurate than a rotary but may result in uneven application if not careful (Figure 1).

Figure 2. Example of a rotary fertilizer spreader.



3. Fertilizers have three numbers on the front of a bag which represent the percentage of nitrogen, phosphorus (phosphate), and potassium (potash). The next step is to purchase the same brand of lawn fertilizer (made by the same manufacturer as the spreader), preferably with a “0” in the middle number which means 0% phosphorus. Only apply phosphorus to the lawn according to soil test results and recommendations as excessive phosphorus has the potential to runoff and degrade water quality.
4. After purchasing the same brand of fertilizer spreader and fertilizer, read the fertilizer bag to find the proper fertilizer spreader setting for that particular fertilizer formulation. Most often, spreaders have a dial with numbers or letters corresponding to the width of the opening in the bottom of the fertilizer spreader. For instance, often a spreader setting of “1” will output a small amount of fertilizer while a spreader setting of “10” will output a larger amount of fertilizer. Since you have a fertilizer bag and a fertilizer spreader made by the same manufacturer, by using the recommended spreader setting, you should be able to apply the proper amount of fertilizer to the lawn area.
5. Note that the walking speed should be normal (1-2 MPH) and even during application of the fertilizer and that the fertilizer spreader should be closed when coming to a complete stop. Also the fertilizer spreader should only be opened after coming up to a normal walking speed.
6. Lastly, make note of the distance that the spreader is throwing the fertilizer to the side (typically about 5 ft depending on product and spreader type) and make subsequent passes across the yard accordingly.

For a more detailed explanation of fertilizer calibration, contact your local OSU Cooperative Extension Office.

## What are the Horizontal Holes on My Trees?

David Hillock

Sap suckers, a close relative of woodpeckers, cause damage to trees that is often attributed to wood boring insects. They visit a tree many times, feeding on sap accumulated in the holes they have drilled. Sap sucker damage appears as rows of holes circling or running vertically on the trunk or larger limbs of the tree. This contrasts with emergence holes of borers that occur in a random pattern on the trunk or in limbs of a tree. Contrary to popular belief, these birds rarely, if ever, dig through bark to capture wood-boring insects, but rather feed on cambium and sap in the phloem. The tree species most commonly attacked by sap suckers are pine, sugar maple, birch, willow, magnolia, apple and pecan.

In Oklahoma, the yellow-bellied sap sucker is the most common species that damages trees. They winter in the South and spend the summer in the northern part of the United States. Thus, they often cause damage during their migrations in the spring through early summer, and again in fall in Oklahoma.



Severe sap sucker damage on an apple tree

### Control

Woodpeckers are classified as migratory, non-game birds and are protected by the Federal Migratory Bird Treaty Act, so killing them is usually out of the question. To protect trees from sapsuckers, wrap barriers of 1/4-inch (0.6-cm) hardware cloth, plastic mesh or burlap around injured areas to discourage further damage. This method may be practical for protecting high-value ornamental or shade trees. In orchards and forested areas it may be best to let the sapsuckers work on one or more of their favorite trees. Discouraging them from select trees may encourage the birds to disperse to others, causing damage to a greater number of trees.

### Frightening Devices

*Visual.* Stationary model hawks or owls, fake and simulated snakes, and owl and cat silhouettes are generally considered ineffective as repellents. Toy plastic twirlers or windmills fastened to the eaves, and aluminum foil or brightly colored plastic strips, bright tin lids, and pie pans hung from above, all of which repel by movement and/or reflection, have been used with some success, as have suspended falcon silhouettes, especially if put in place soon after the damage starts. The twirlers and plastic strips rely on a breeze for motion. Large rubber balloons with owl-like eyes painted on them are included in the recent array of frightening devices used to scare woodpeckers. A good deal of attention has recently been given to round magnifying-type shaving mirrors installed over or adjacent to damaged areas to frighten woodpeckers with their larger-than-life reflections. Success is sometimes reported by those using the method and this encourages further testing.

*Sound.* Loud noises such as handclapping, a toy cap pistol and banging on a garbage can lid have been used to frighten woodpeckers away from houses. Such harassment, if repeated when the

bird returns, may cause it to leave for good. Propane exploders (gas cannons) or other commercial noise-producing, frightening devices may have some merit for scaring woodpeckers from commercial orchards, at least for short periods. Because of the noise they produce, they are rarely acceptable near inhabited dwellings or residential areas. Around homes, portable radios have been played with little success in discouraging woodpeckers. Expensive high-frequency sound-producing devices are marketed for controlling various pest birds but rarely provide advertised results. High-frequency sound is above the normal audible hearing range of humans but, unfortunately, above the range of most birds too. Woodpeckers can be very persistent and are not easily driven from their territories or selected pecking sites. For this reason, visual or sound types of frightening devices for protecting buildings — if they are to be effective at all — should be employed as soon as the problem is identified and before territories are well established. Visual and sound devices often fail to give desired results and netting may have to be installed.

### **Repellents**

*Taste.* Many chemicals that have objectionable tastes as well as odors have been tested for treating utility poles and fence posts to discourage woodpeckers. Most have proven ineffective or at least not cost-effective.

*Odor.* Odors such as from naphthalene (mothballs) and wood treatments, such as creosote and pentachlorophenol, are of doubtful merit and do not resolve the woodpecker problem.

*Tactile.* Sticky or tacky bird repellents such as Tanglefoot®, 4-The-Birds®, and Roost-No-More®, smeared or placed in wavy bands with a caulking gun on limbs or trunks where sapsuckers are working, will often discourage the birds from orchard, ornamental and shade trees. These same repellents can be effective in discouraging birds if applied to wood siding and other areas of structural damage. A word of caution: some of the sticky bird repellents will discolor painted, stained or natural wood siding. Others may run in warm weather, leaving unsightly streaks. It is best to try out the material on a small out-of-sight area first before applying it extensively. The tacky repellents can be applied to a thin piece of pressed board, ridged clear plastic sheets, or other suitable material, which is then fastened to the area where damage is occurring.

### **Trapping**

Live traps have been tried in attempts to capture woodpeckers for possible relocation rather than killing the birds. None of those explored were very successful, and more research is needed to develop an effective woodpecker live trap.

## **Choosing a Pest Control Method**

*David Hillock*

Earth-Kind gardeners learn to live with some pests in their gardens but must also determine when to treat with insecticides and which insecticides to use. They must become familiar with insect friends and foes to know which ones to fight and which to encourage.

Correct identification of an insect or other pest is the first step in selecting a control method. This means **frequent inspections** and **monitoring** of garden crops. Complete elimination of pests is nearly impossible. The goal of pest control is to lower the number of pests to a manageable level.

If you cannot diagnose the problem yourself, you can get help from your county Extension Educator, who has publications with pictures of the pests and the damage they cause. If necessary, the educator can also provide information on how to select, prepare and send specimens to OSU entomologists or pathologists for identification of insects or diseases.

Once you have identified the pest, use all available cultural and mechanical pest control measures first, which may include hand-picking and destroying insects.

Avoid using any insecticide when only minor damage is evident and an action threshold has not been reached. An action threshold is the point when it is less expensive to use an insect control method than to endure damage to your plants—a smattering of grasshopper nibbles in a tomato planting or discovery of a few white grubs in the soil beneath your lawn normally are not serious enough problems to justify the use of insecticides.

If insecticide application is required, choose the material proven by research to be the safest and most effective. Consider spot treating areas rather than giving blanket treatments. Avoid improper use of pesticides—make sure you are not trying to use an insecticide on a problem caused by a fungus or bacterium.

For more information on Earth Kind Gardening and Integrated Pest Management (IPM) techniques, see OSU Extension Fact Sheets - [HLA-6431 Earth-Kind Gardening Series: Cultural Control Practices](#), [HLA-6432 Earth-Kind Gardening Series: Mechanical Pest Controls](#), [HLA-6433 Earth-Kind Gardening Series: Botanical Pest Controls](#), [HLA-6434 Earth-Kind Gardening Series: Biological Pest Controls](#).

## **Black Spot of Roses**

*David Hillock*

Black spot (caused by the fungus *Diplocarpon rosae*) is a very serious disease of rose plants. It is characterized by nearly circular black spots on leaves. The spots are distinguished from other leaf spot diseases by the fringed margins and consistently black color of the spots.

The spots vary in size from less than 1/16 to 1/2 inch or more in diameter. Spots may merge to produce large irregular lesions. Yellowing often occurs over the entire leaf, but it may develop only around the spots. When plants are badly infected, leaves drop prematurely and canes may become completely defoliated, thereby reducing the quantity of the flowers and eventually killing the plant.





Warm, wet weather favors the spread of pathogens. Spores of the fungus are spread mainly by splashing water or rain. They germinate in water and infection takes place only when water remains on the leaves for periods of six hours or longer.

### **Control**

1. Remove and destroy infected leaves during the season; remove infected twigs when pruning.
2. Avoid overhead watering.
3. Plant roses in an area with good soil drainage and ventilation. Avoid shady spots in dense plantings.
4. Prune out old and diseased canes in the fall or winter.
5. Mulch soil around plants and sprinkle dusting sulfur on the mulch during the spring (see OSU Extension Fact Sheet [HLA-6403 Roses in Oklahoma](#)).
6. If one wishes to not have to spray for black spot and powdery mildew control, there are some resistant cultivars that can be grown in Oklahoma. For more information about disease resistant roses see OSU Extension Fact Sheet [EPP-7607 Disease of Roses](#) or visit your local garden center/nursery.
7. For chemical control on disease-susceptible cultivars, visit your local garden center/nursery or contact your County Extension Office. It is important that weekly fungicide applications begin with new growth in the spring and continue until frost in the fall. Sprays may be omitted during hot, dry periods in the summer. Many general purpose rose dusts and sprays are available that contain compatible materials for control not only of black spot and powdery mildew, but also for common insect pests. These materials have been well formulated and, if used properly, will give excellent results. During the dormant season, spray with lime sulfur.

## **Upcoming Horticulture Events**

### **IPM Conference**

May 16, 2012 – Stillwater, OK

<http://www.hortla.okstate.edu/events/pdf/2012ipm.pdf>

### **Oklahoma Pecan Growers Association Annual Convention**

June 21-23, 2012 – Norman, OK

[http://www.hortla.okstate.edu/pecan/opga/images/2012\\_OPGA\\_Convention.pdf](http://www.hortla.okstate.edu/pecan/opga/images/2012_OPGA_Convention.pdf)

### **Plant Materials Conference**

August 28, 2012

Wes Watkins Center – Stillwater, OK

### **Tree Care Conference**

October 3, 2012

Wes Watkins Center – Stillwater, OK

**GardenFest**

October 6, 2012

The Botanic Garden at OSU – Stillwater, OK

**Global Horticulture Conference**

November 7, 2012

Wes Watkins Center – Stillwater, OK

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