

## *What's Inside*

- Fall lawn care
- Protecting our bees
- Fall webworm creates webs in trees
- Gardening tips for September
- Upcoming events

Jennifer Schutter  
University of Missouri Extension  
Horticulture Specialist  
660-665-9866  
[schutterjl@missouri.edu](mailto:schutterjl@missouri.edu)

If you need this newsletter in  
alternative format, please contact  
Jennifer Schutter at the  
Adair County Extension Center.

## THE FRUITS OF FALL

Fall is just around the corner, which means cooler weather, beautiful fall foliage and delicious fall fruits. Some of these fall fruits include apples, pears, grapes, persimmons, figs and plums.

Apples that will be eaten immediately may be ripened on the tree. Apples that are to be stored should be picked when hard but mature, showing the mature skin color but with a hard flesh. Storage apples should be harvested before fresh eating apples. Most apple cultivars have brown seeds when ready for harvest. When harvesting, do not remove the stems from apples that will be stored. Only apples without bruises, insect or disease damage, cracks, splits or mechanical injury should be stored.

While most types of fruit reach their peak on the branch or vine, pears need to be picked before ripening. If left on the tree, pears ripen from the inside out. By the time they seem to be at the ripe stage, they are beyond it, usually mushy with a mealy texture beneath the skin. The best way to tell if a pear is ready to harvest is by taking the fruit in your hand and tilting it horizontally. The mature fruit will easily come away from the branch at this angle (as opposed to its natural vertical hanging position). If it is not yet ready for picking, it will hold on to the branch. Once harvested, most pears will require about a week to ripen at room temperature (about 65-72°F). If you store the fruit in a paper bag, you can speed up this process so that it will ripen in just a few days.



Grapes are typically harvested mid-August through September in Missouri. A ripe grape will crush easily. A ripe grape is plump, thick and juicy. Each variety develops special flavors called varietal flavor. A fully ripe grape develops its varietal flavor more fully. Harvest when weather conditions are dry. Wet grapes do not keep well. Several factors will help you determine if it is time to harvest your grapes: color change, seed changes from green to brown, slightly less firm to the touch, birds on the vines. The better the condition of the grape the longer they will keep. Do not wash grapes before storing. Remove damaged, soft, moldy or bruised grapes before putting in a plastic bag and storing in the refrigerator. Store in a zip lock plastic bag to help preserve freshness and prevent the skin from drying out.

Persimmons are ready to harvest in mid to late fall when the skin is soft and orange. Ripe persimmons are fragile and bruise easily so handle them with care. Persimmons mature at just the right time for wild animals that are storing body fat against the cold and famine of winter. Raccoons, opossums, squirrels, deer, rabbits, groundhogs, chipmunks, mice and shrews all share the persimmon feast.

## FALL LAWN CARE

Home lawns in most years usually struggle through the perils of summer – high heat, humidity, drought and insect problems. We usually look forward to cooler days and nighttime temperatures in September. With this in mind, it's time to think about fall lawn maintenance.

### Fall is the best time of year to fertilize lawns

According to MU Extension publication G6705, Cool Season Grasses: Lawn Maintenance Calendar, fall is the best time to add fertilizer to lawns. For best results apply fertilizer based on soil test recommendations. Most lawns do best if fertilized at least once a year. Additional fertilization will depend on the desired level of turf appearance, turfgrass species, soil type and fertilizer carrier. If only one fertilizer application per year is desired, September is an excellent time for it. If a second application is desired, mid-October is a good time for it. Moderate rates in October or November, after days are cool enough to discourage vigorous leaf growth (50 degrees F), will help prolong green color into the winter and at the same time encourage development of a stronger root system for next spring's growth.

If a spring fertilizer application is desired, it should be done in mid-April to early May. Fertilizer applications after May increase the risk of diseases that can injure or kill turfgrass. If fertilizer must be applied after May, give greater attention to thatch and disease control measures, as well as to irrigation timing, timely mowing, and mowing height.

Homeowners have a wide variety of fertilizers available to them for fall fertilization. Many organic fertilizers, such as Milorganite, Sustane and Ringer are available and will provide an excellent source of slow released nitrogen. Organic fertilizers do require soil microbes to release nutrients, therefore as soil temperatures decrease by late fall, performance of these fertilizers may drop off.

More inorganic types of fertilizers are available to homeowners and can be somewhat confusing. Many products have much higher amounts of nitrogen and most are soluble forms (quick release) of fertilizers. Quick release forms of fertilizers are there and gone after about two weeks. You will get a quick flush of green growth, then a quick tapering off of color and growth. Find fertilizers with a good balance of N-P-K (nitrogen/phosphorus/potassium) with a ratio somewhere around 3-1-2. Also look at the ingredient label on the bag and find a product with 30 to 70% slow-



release nitrogen. This way your fertilizer is released over a longer period of time requiring fewer applications and allowing the plants to more efficiently utilize plant nutrients.

Winterizing fertilizers are usually recommended as the final application of the fall. Good winter fertilizers will have higher and equal amounts of nitrogen and potassium (first and third numbers of the fertilizer components). However, there are conflicting comments about applications of potassium for hardening off plants before winter dormancy. Plants harden off by reducing the amount of water in plant cells, therefore reducing the threat of winter freezing. It is a practice of higher importance for warm-season (bermuda and zoysia) grasses as opposed to cool-season grasses.

### Aeration

Aeration is a practice of pulling soil plugs to open the soil surface for better nutrient and water movement as well. It is a practice that also helps to reduce compaction and thatch by spreading soil plugs on the surface. Soil plugs are crumbled and fall freely into aeration holes as well as spreading some soil into the thatch layer where soil microbes can feed on thatch debris. Aeration is a practice that can be done in both spring and fall. Aeration is the very best way to begin a fall fertilization program. Applications of fertilizer after aeration will move nutrients immediately into the root zone of your lawn. This practice has shown excellent results in the density and color of cool-season turfgrasses on their way to recovery from summer stresses.

Aeration equipment can be found at local rental stores or garden centers as well. A machine that pulls a ½" diameter plug three to four inches deep on four inch centers will do an excellent job. Machines that force hollow tines into the soil are better than pull-type drums with tines. Not all machines will meet these specifications, however any amount of aeration is better than no aeration to kick-off fall fertilization.

For more lawn care tips for cool season grasses such as tall fescue and Kentucky bluegrass see MU Extension guide G6705, Cool Season Grasses: Lawn Maintenance Calendar. Find this guide online at <http://extension.missouri.edu/> or visit your county University of Missouri Extension office.

Additional questions on aeration and fall fertilization can be directed to the MU Turfgrass Research Center @ (573) 442-4893.

**Source:** Max Glover, agronomy specialist, Shelby County Extension and Dr. Brad Fresenburg, extension/research associate.

## PROTECTING OUR BEES

In late July I attended the National Association of County Agriculture Extension Agents Conference in Little Rock, Arkansas. This is a week-long conference that gives extension agents an opportunity to learn what's new in the agriculture industry and the latest in ag research that they can take home and use in their daily work. It also gives them a chance to network with other agents from across the nation, exhibit their work in the form of posters, give presentations on work they have done, visit a trade show to learn about agricultural products and tour agricultural sites in the state.

I attended a session presented by Bayer Advanced, a company that produces garden products. When gardeners think of Bayer Advanced, one of the first things that come to mind is the "chemicals" they produce to control insects and disease. Today, Bayer is doing much more than producing garden chemicals. They are a leader in environmental stewardship and the protection of beneficial insects and bees. Bayer has Bee Care Centers in North America and Europe to promote and protect pollinator health. Ongoing research includes integrated management of the multiple factors affecting bee health, including parasites, predators, diseases, seasonal management and environmental stresses. Educational tours at the centers are also provided. While it is clear that honey bees and other pollinators are important for modern agricultural production, it is also true that the demand for pollination has never been greater, and this has presented unique challenges for farmers and beekeepers alike. Finding solutions to increase yields and protect pollinators is critical to food production and agricultural sustainability, which is why Bayer established its Bee Care Program.

In recent years there has been a lot of talk about neonicotinoids. So, just what are they? Neonicotinoids are an important class of insecticides helping farmers manage harmful pests that limit crop production and quality. Research shows neonics are critical to growers, making up an integral part of their IPM (integrated pest management) programs, significantly increasing crop yields, and adding billions of dollars to the U.S. economy, benefiting farmers and communities. Farmers, ornamental, turf and vegetative professionals also value the use of neonicotinoids because of their performance and their environmental and safety profiles. These insecticides offer systemic properties, exhibit long-term efficacy in managing harmful pests and provide lower risks to the applicators, customers and their pets than some alternatives.

When used according to the label, neonicotinoids pose little threat to bee colony health. In fact, soil treatments actually pose less risk to bees than many other insecticide applications because they can greatly limit the exposure potential. Neonicotinoid residues in bee-attractive parts of the plant are generally well below levels of concern. Bayer will continue to practice sound product development and stewardship that recognizes and respects the important role of bees in our backyards, our communities, our crop fields and our world.

What is Feed a Bee? You may have heard about this, or not. Feed a bee is a major initiative to increase food for bees and other pollinators by planting more flowers and establishing additional forage acreage. Working with individuals and organizations across various sectors, Feed a Bee helps to provide pollinators with the diverse forage and habitat they need to thrive. Visit [feedabee.com](http://feedabee.com) to learn more.

**Source:** Bayer Bee Care Program North America

## FALL WEBWORM CREATES WEBS IN TREES

Fall webworm is often a serious pest of many species of forest, shade, fruit and ornamental trees, except conifers, found throughout the United States. Trees may be heavily or completely defoliated. Persistent infestations on individual trees may kill branches and top growth.

### Integrated Pest Management Strategies

**1. Live with the problem and let nature take its course.** Hosts are seldom seriously harmed because defoliation usually occurs later in summer rather than during a period of active growth and not enough terminal growth is consumed to affect tree growth. In addition, more than 75 natural enemies parasitize and prey on the fall webworm.

**2. Prune out webs.** Webs are always on branch ends and are easier to remove when they are small. Pole pruners are helpful for reaching into trees.

**3. Apply insecticidal sprays.** If chemical control is truly necessary, treatment is recommended when webs first appear. Smaller caterpillars are more susceptible to insecticides and, secondly, the webbed nests are somewhat waterproof and can be difficult to penetrate with sprays. The microbial insecticide Bt (*Bacillus thuringiensis*) is available as Dipel or Thuricide and can be used on the small caterpillars. Other pesticides registered for use include acephate (Orthene), carbaryl (Sevin), pyrethrins and spinosad.

Source and for more information: Missouri Botanical Garden, <http://tinyurl.com/z7qav2d>

University of Missouri Extension "Insect Defoliators of Missouri Trees: Web Producers," <http://extension.missouri.edu/p/g7271>

## GARDENING TIPS FOR SEPTEMBER

### ORNAMENTALS

- Plant evergreens now.
- Take cuttings of annuals to have vigorous plants for over-wintering.
- Plant spring bulbs except for tulips as soon as they are available. Keep tulips in a cool, dark place and plant in late October.
- Divide perennials, especially spring bloomers. Enrich the soil with peat moss or compost before replanting.
- Divide peonies now. Replant in a sunny site and avoid planting deeply.
- Lift gladiolus when their leaves yellow. Cure in an airy place until dry before husking.
- Begin forcing poinsettias to bloom at the end of the month. Place plants in a cool, dark room or closet from 5 p.m. until 8 a.m. for about 8 weeks or until top leaves turn red.

### VEGETABLES

- Sowing seeds of radish, lettuce, spinach, and other greens in a cold frame will prolong fall harvests.
- Pinch out the top of brussel sprout plants to plump out the developing sprouts.
- Keep broccoli picked regularly to encourage additional production of side shoots.

### FRUIT

- Pick pears before they are fully mature. Store in a cool, dark basement to ripen.
- Discard any spoiled or fallen fruits.
- Paw paws ripen in the woods now.
- Check along peach tree trunks to just below the soil line for gummy masses caused by borers. Probe holes with thin wire to puncture borers.

### TURFGRASS

- Begin fall seeding or sodding of cool season grasses. Seedbeds should be raked, de-thatched, core-aerified, fertilized, and seeded. Keep newly planted lawn areas moist, but do not wet.
- If soils become dry, established lawns should be watered thoroughly to a depth of 4-6 inches.
- Cool season lawns are best fertilized in fall. Make up to 3 applications between now and December. Do not exceed rates recommended by fertilizer manufacturer.
- It is not uncommon to see puff balls in lawn areas at this time.
- Newly seeded lawns should not be cut until they are at least 2-3 inches tall.

### MISCELLANEOUS

- Fall is a good time to add manure, compost, or leaf mold to garden soils for increasing organic matter content.
- Monitor plants for spider mite activity. Reduce their numbers by hosing off with a forceful spray of water.
- Seasonal loss of inner needles on conifers is normal at this time. It may be especially noticeable on pines.

-Missouri Botanical Garden-

## UPCOMING EVENTS

**August 24-November 9: Master Gardener training** is taking place in Macon this fall. Registration is now closed. The next class will be in Kirksville next fall.

**September 1: Tomato Fest,** 4 pm, MU Bradford Research Farm, Columbia. Will feature taste tests of over 250 varieties of tomatoes, 160 varieties of peppers, tomatillos, sweet corn and more.

**September 6:** Salt River Master Gardener meeting, 7:00 p.m., Sesquicentennial Building, Palmyra. Rhonda Adair from Ursa, IL will be instructing us on how to grow and care for gourds to be used for decorating. She will have a display of the gourds she has intricately carved, and will give us some tips for carving gourds.

**September 16-18: State Master Gardener Conference,** Kansas City. Register at <http://www.mgkccconf.com/>.

**December 2-3:** Missouri Livestock Symposium, William Matthew Middle School, Kirksville.

**July 10-14, 2017:** International Master Gardener Conference, Portland, OR. See the gardens of the Pacific northwest.

UNIVERSITY OF MISSOURI

 **Extension**

*Garden Talk!*

*Produced monthly at the Adair County University of Missouri Extension Center, 503 E. Northtown Road, Kirksville, MO 63501 Ph. 660-665-9866 Fax 660-665-9876*

Editor: Jennifer Schutter

Production: Vanessa Miller, Jill Belling and Master Gardener volunteers

University of Missouri Extension provides equal opportunity to all participants in extension programs and activities, and for all employees and applicants for employment on the basis of their demonstrated ability and competence without discrimination on the basis of their race, color, religion, sex, sexual orientation, national origin, age, disability or status