

Horticulture 2014 Newsletter No. 6 February 11, 2014

Video of the Week: [Composting: Choosing a Bin](#)

UPCOMING EVENT

Tomato Grafting Workshop
Saturday, March 8
Manhattan

<http://www.hfrr.ksu.edu/doc3882.ashx>

TURFGRASS

Lawn Calendar for Cool-Season Grasses



The following suggestions are for cool-season grasses such as Kentucky bluegrass or tall fescue. Zoysiagrass, bermudagrass, and buffalograss are warm-season grasses and require a different maintenance regime. A warm-season grass calendar will be covered in a later newsletter.

March

Spot treat broadleaf weeds if necessary. Treat on a day that is 50 degrees or warmer. Rain or irrigation within 24 hours of application will reduce effectiveness.

April

Apply crabgrass preventer when redbud trees are in full bloom, usually in April. The preventer needs to be watered in before it will start to work. Remember that a good, thick lawn is the best weed prevention and may be all that is needed.

May

Fertilize with a slow-release fertilizer if you water your lawn or if you receive enough rainfall that your turf normally doesn't go drought-dormant during the summer. If there are broadleaf weeds, spot treat with a spray or use a fertilizer that includes a weed killer. Rain or irrigation within 24 hours of application will reduce effectiveness of the weed killer, but the fertilizer needs to be watered in. If you are using a product that has both fertilizer and weed killer, wait 24 hours after application before watering in.

June through Mid-July

Apply second round of crabgrass preventer by June 15 – unless you have used Dimension (dithiopyr) or Barricade (proflumicafene) for the April application. These two products normally provide season-long control with a single application. Remember to water it in. If grubs have been a problem in the past, apply a product containing imidacloprid during the first half of July. This works to prevent grub damage. It must be watered in before it becomes active.

Late-July through August

If you see grub damage, apply a grub killer that contains Dylox. Imidacloprid is effective against young grubs and may not be effective on late instar grubs. The grub killer containing Dylox must be watered in within 24 hours or effectiveness drops.

September

Fertilize around Labor Day. This is the most important fertilization of the year. Water in the fertilizer.

November

Fertilize. This fertilizer is taken up by the roots but is not used until the following spring. Water in fertilizer. Spray for broadleaf weeds even if they are small. Broadleaf weeds are much easier to control in the fall than in the spring. Spray on a day that is at least 50 degrees. Rain or irrigate within 24 hours reduces effectiveness. Use label rates for all products! (Ward Upham)

FLOWERS

Fertilizing Spring-flowering Bulbs



The best time to fertilize spring-flowering bulbs is when foliage emerges in the spring rather than at flowering. Traditionally, gardeners have applied fertilizer during bloom or a bit after, but because bulb roots start to die at flowering, fertilizer applied at bloom is wasted. Roots are active when the foliage first pokes through the ground. Nutrients applied then help the plant produce flowers the following year. If bulbs have been fertilized in the past, there is often plenty of phosphorus and potassium in the soil. It is best to

use a soil test to be certain. If the soil needs phosphorus and potassium, use a complete fertilizer (such as 10-10-10, 9-9-6, etc.) at the rate of 2.5 lbs. per 100 square feet. This would equal 1 rounded teaspoon per square foot. If phosphorus and potassium are not needed, blood meal makes an excellent fertilizer. It should be applied at the rate of 2 lbs. per 100 square feet or 1 teaspoon per square foot. Lawn fertilizers such as a 27-3-3 or 30-3-3 can be used, but cut the rate by a third. Also make sure the lawn fertilizer does not contain a weed preventer or weed killer. Remember to leave the foliage until it dies naturally. The energy in the foliage is transferred to the bulb as the foliage dies and will help bloom next year. (Ward Upham)

FRUIT

Pruning Overgrown Apple Trees



Apple trees that are not pruned for several years will often produce so many branches that little energy is left for fruit production. Overgrown apple trees are also difficult to harvest and spray. Gardeners who have such a tree are often at a loss as to how to get it back in shape.

Often the best recommendation for such a tree is to make one pruning cut at ground level and start over with a new tree. Trees may have sentimental value that will make revitalization worth the time and

effort. Realize that this will be a multi-year process because no more than 30 percent of the tree should be removed in one year. Here are some steps to follow:

1. Remove all dead wood. This does not count toward the 30 percent.
2. Remove suckers from the base of the tree.
3. Choose approximately six of the best branches to keep as scaffold branches.

Remove all others. Branches should be cut flush to the branch collar. The collar is the natural swelling that occurs where a branch connects to the trunk or to a larger branch. Removing the collar would leave a larger wound that would take additional time to heal. Do not paint wounds. Wounds heal more quickly if left open.

Candidates for removal include branches with narrow crotch angles, which are more likely to break in wind and ice storms, and those that cross branches you will save. This may be all that is possible the first year if the 30 percent threshold has been reached.

4. Thin the branches on each scaffold branch. Remove crowded branches to open up the tree to light and allow humidity to escape. Shorten each scaffold branch by cutting back to a side branch. When you are through, the tree should have enough wood removed so that a softball can be thrown through the tree.

Severe pruning often will cause an apple tree to produce vigorous side shoots from the trunk called water sprouts. Main branches will also produce suckers that grow straight up. The suckers and water sprouts should be removed throughout the growing season so the center of the tree stays open. (Ward Upham)

VEGETABLES

Soil Temperature and Vegetables

One of the most neglected tools for vegetable gardeners is a soil thermometer. Soil temperature is a much better measure of when to plant than air temperature or the calendar.



Planting when soil is too cool can cause seeds to rot and transplants to sit there.

A number of vegetables can germinate and grow at cool temperatures. For example, peas will germinate and grow well at a soil temperature of 40 F. Though lettuce, parsnips, and spinach can sprout at a soil temperature of 35 F, they prefer at least 45 F for best germination and growth.

Radishes also do well at a soil temperature of 45 F. Warm-season crops such as tomatoes, sweet corn and beans prefer at least 55 F for germination (or transplanting), but others such as peppers, cucumbers, melons and sweet potatoes need it even warmer, about 60 F.

Taking soil temperature accurately is a bit of a science. First, use a metal soil thermometer, which is sold in many garden and hardware stores. Take temperature 2.5 inches deep at about 10 to 11 a.m. Temperature variations throughout the day and night affect soil temperature, with lowest readings after dawn and warmest around mid-afternoon. The late-morning reading gives a good average temperature. Also be sure to get a consistent reading for four to five days in a row before planting, and make sure a cold snap is not predicted.

An excellent guide sheet on this subject is published by the Alabama Cooperative Extension System and is titled "Soil Temperature Conditions for Vegetable Seed Germination." It can be found at <http://www.aces.edu/pubs/docs/A/ANR-1061/ANR-1061.pdf> (Ward Upham)

MISCELLANEOUS

Soil Testing



Most gardeners think that soil tests are done only to find out what nutrients are deficient. However, it is just as important to know if you have adequate levels of nutrients so you don't add unneeded fertilizer. The most basic soil test checks pH and the levels of phosphorus and potassium. Most of the lawn and garden soil tests that come out of our soil-testing lab show more than adequate levels of both phosphorus and potassium. If those nutrients are not needed, applying them is a waste of money and can be a source of pollution. In extreme cases,

excess phosphorus can interfere with the uptake of micronutrients. So, if you haven't taken a soil test in several years, take one this spring.

Begin by taking a representative sample from a number of locations in the garden or lawn that goes from the surface to 6 to 8 inches deep. Mix the samples together in a clean container and select about 1 pint of soil. For more detail on taking a soil test, see <http://www.agronomy.ksu.edu/soiltesting/p.aspx?tabid=40>. Take the soil to your local K-State Research and Extension office to have tests done at the K-State soil-testing laboratory for a small charge. A soil test determines fertility problems, not other conditions that may exist such as poor drainage, poor soil structure, soil borne diseases or insects, chemical contaminants or damage, or shade with root competition from other plants. All of these conditions may reduce plant

performance but cannot be evaluated by a soil test. (Ward Upham)

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To view Upcoming Events: http://tinyurl.com/fswqe_

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