# Horticulture Tips September 2008

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

#### **GARDEN TIPS FOR SEPTEMBER!**

David Hillock

#### <u>Landscape</u>

- Watch for fall specials at garden centers and nurseries since fall is a great time for planting many ornamentals.
- Choose spring flowering bulbs as soon as available.
- Plant cool-season annuals like pansies, ornamental cabbage or kale, snapdragons and dusty miller when temperatures begin to cool.
- You have all of September to plant cool-season vegetables like spinach, leaf lettuce, mustard and radishes, and until the middle of September to plant rutabagas, Swiss chard, garlic and turnips.
- Watch for and control any late infestations of tree webworms.
- Twig girdler insects should be controlled if large numbers of small branches of elms, pecans, or persimmons are uniformly girdled from the tree and fall to the ground.
- Begin to reduce the amount of light on outside tropical houseplants by placing them under shade trees before bringing them indoors for the winter.

#### Lawn

- Last nitrogen fertilizer application of the year on warm-season grasses should be applied no later than September 15. (HLA-6420)
- Winter broadleaf weeds like dandelion will begin to emerge in late September, which is also the best time to control them with a 2, 4-D type herbicide.
- If pre-emergent control of winter-annual weeds (henbit, chickweed, annual bluegrass, etc.) is desired in lawns, the application should be completed by the 2nd week of September. (HLA-6421) *Note: Do not treat areas that will be seeded in the fall.*
- Continue bermudagrass spray program with glyphosate products for areas being converted over to tall fescue this fall. (HLA-6421)
- Plan to seed bluegrass, fescue or ryegrass as needed in shady areas in mid to late September. Fall is the best time to establish cool-season lawns. (HLA-6419)
- White grub damage can become visible this month. Apply appropriate soil insecticide if white grubs are a problem (EPP-7306). Water product into soil.

# Watering is Important after Harvest to Reduce Plant Stress

Eric T. Stafne

One of the many critical issues we deal with as producers of perennial horticultural crops in Oklahoma is cold hardiness. Much of the level of cold hardiness that can be achieved by a

particular plant is already genetically determined. Numerous genes work together in influencing what level of tolerance an individual plant has to cold temperatures. Yet, as is usually the case when many genes are involved, environment also plays a role.

Not only the environment that is out of the control of the producer is important, but also management strategies that are employed by the producer. One thing a producer can do is to continue an irrigation schedule after harvest. Often, one is so focused on nurturing and harvesting a crop that subsequent management may be relaxed. This can be a very big mistake in the case of perennial fruiting crops. Many of the controllable factors involved in plant cold hardiness are managed through plant stress reduction. Of course, this includes control of pests (insects, diseases and weeds), proper soil fertility, crop load management and adequate irrigation. If these factors are properly carried out until harvest, the plant will produce a healthy, abundant crop; however, if ignored after harvest the plant may suffer damage that predisposed it to potentially fatal conditions.

For a plant, producing a crop is a tremendous burden. Much of the water, minerals, hormones, and carbohydrates the plant produces are delivered to the ripening crop thus putting the plant itself at a deficient (or at least at a no-gain situation). Once the crop is removed, that is the time for the plant to restock its reserves for the coming year. Many of these reserves will be stored in the root system over the winter, so the healthier the root system the more reserves that can be stored. Available water plays a role in a healthy root system. Because a root system can't be seen, sometimes it is in an "out of sight, out of mind" situation; however, if roots are robbed of moisture they can die just like the visible limbs and shoots aboveground. So, don't turn off the irrigation too soon. Give your fruiting plants a good drink after harvest, and then slowly reduce watering into the late summer and fall. End your irrigation by October 1, or slightly earlier if rainfall is adequate, and the plant should be fine heading into winter. If watering is done too late into the fall, the plant will continue to grow leaving that new growth highly susceptible to freeze damage; therefore be prudent about watering and your plants will reward you at harvest time.

## **Vegetable Gardening Record-Keeping**

Jim Shrefler

Many Oklahoma gardeners were thrown a curve ball the past few days with unseasonable cool temperatures and up to several inches of rain – in August! If it is still too wet to be out working in the garden, maybe now would be a good time to catch up with the garden record-keeping. Why is this important? There are several reasons as the following discussion will explain. What should be done to develop a record keeping file? Several important items to include are: 1) Draw a map for each year of where different crops are located in the garden, 2) Make a list of specific crop varieties that are used and 3) Conduct an inventory of garden supplies such as fertilizers and pesticides.

A garden map is valuable resource for long term planning of gardening activities. Crop rotation is a valuable practice for preventing certain disease problems. Rotations of several years are, in general, a wise practice. For example, you might use a rotation of tomato - sweet corn – green bean over a three year period to keep from having plants of the same family two years in a row in the same location. In the event of certain soil borne disease problems, having knowledge of previous crops can be very helpful for problem diagnosis. Most of us can remember where

things were last year in the garden. However, if trying to remember two years or more back, the memory may not be quite as clear. A map of each year's garden can be very valuable when this sort of information is needed. If, in addition to making a map, one keeps information on how specific crops did in a given year, in combination with crop location in the garden, it may be discovered that a certain crop does better in certain locations. Having maps available from past years will enable you to better evaluate your gardening practices.

Keeping a list of the specific crop varieties, or cultivars, is often helpful with future garden planning. Some gardeners pay close attention to varieties while others use what happens to be available at the garden center. When you find varieties that you really like, and ones that do well, it is sure nice to know which ones they are so you can avoid guessing on what to use in future years. Once you make a list at the start of the garden season of the varieties planted, keep it handy for making notes as the season progresses. Write down what you like about the variety as well as noting those plants that do not do so well. This will be helpful with future gardens for avoiding those varieties that do not do as well in your situation.

An inventory of garden supplies can have safety implications and can also save you money. Invariably, when some of us do a garage or garden shed cleanup, we often find that we have duplicate containers of certain gardening chemicals. This can be a hazard as old containers may eventually begin to leak or toxic chemicals degrade and create a disposal problem. If not a hazard, duplicates or unused chemicals represent a waste of money. What can be done to prevent such situations? Make an inventory of chemicals you have on hand and keep it in a location where it can be easily seen and not forgotten. Make it a habit to add newly purchased materials to the list. If possible, it is also wise to keep such items in a clearly marked location so that, in the event of any emergency situation, people needing to enter the area will be aware of a possible chemical hazard.

These are just some of the basics when it comes to garden record-keeping. Additional information to consider keeping track of includes fertilizer kinds and amounts used, pest problems encountered, manure additions to the garden, etc. It may soon be time to get back out to work in the garden, so get caught up on your record-keeping while you can!

## **Cool-season Lawn Planting and Renovation**

David Hillock and Dennis Martin

The period mid September through early October in Oklahoma typically has near-ideal day/night temperature combinations for germination of cool-season grasses. So, let the tall fescue, perennial ryegrass and Kentucky bluegrass seeding begin (if you have access to water)! Sodding of these grasses is also appropriate at this time. The best temperatures for germination are when we experience a mid-80s day and upper 50s/low 60s night. You might be asking, is it possible that we will get fooled and the temperatures will shoot back up. Sure, anything is possible in Oklahoma, but what is key to remember is that it is the night time lows that are important. When you are seeing evening temperatures from the upper 50s to mid 70s, it's time to seed cool-season lawns. So even if a few day-time highs slip back in the mid to upper 90s, (and it will happen) our day-time lows are looking great!

Fact Sheet HLA-6418 covers turfgrass selection, while HLA-6419 covers the establishment (planting method) and HLA-6420 covers the mainstream long-term maintenance practices (mowing, fertilization, irrigation, etc). Find these on the web at the turf collection located at: <a href="http://pods.dasnr.okstate.edu/docushare/dsweb/View/Collection-216">http://pods.dasnr.okstate.edu/docushare/dsweb/View/Collection-216</a>.

There are many satisfactory performing tall fescues. These include but are not limited to Crossfire II, Houndog V, Millenium, Rembrandt, Plantation to name just a few. There are dozens of good performers. A blend is a combination of two or more varieties within the same species. A mix is two or more species combined. Blends and mixes are beneficial in cool-season lawns as they broaden the genetic diversity present. In theory, this decreases the likelihood that your lawn will be completely wiped out by a single disease or single insect infestation.

Most importantly, if turf-type quality is expected, one should choose a turf-type rather than a forage type tall fescue. Forage type fescues include Fawn and Alta. General purpose soil stabilizer types include the old K-31, Kentucky 31, KY 31, they get used as a forage and as a lawn but these variations on Kentucky 31 are not true turf-type tall fescue despite what the marketing message on the seed bag might say. Turf-types are selected for improved color, texture, density, slower vertical leaf expansion rate and other important characteristics for lawn use.

Tall fescues are best in medium to light shade. There are no hard and fast rules for "hours of sunlight" required. There are no perfect solutions to dense shade where grasses fail repeatedly, year-in and year-out. It is best to take a hint and if grass is failing in a shaded site many years, it's time to move on to mulches, shade tolerant perennial ground covers, hardscape elements, etc. Sometimes grass does not die exclusively from shade but rather the combination of shade and tree root competition for nutrients and water in combination with added disease pressure due to less air movement and more grass canopy moisture caused by less air movement in a "tight and mature" landscape.

In lightly shaded areas, mixtures of tall fescue and Kentucky bluegrass can sometimes work best. While Kentucky bluegrass is generally not as shade tolerant as tall fescue, it still has some shade tolerance and it has improved brown patch disease and Rhizoctonia blight resistance over that of tall fescue. Brown patch is usually the most series disease of tall fescue. These mixtures will often have Kentucky bluegrass present at 5 to 10% by weight and tall fescue at 90 to 95%. Remember, there are 10 times as many bluegrass seeds in a pound of bluegrass as there are tall fescue seeds present in a pound of fescue seed so we use about 10 times less bluegrass seed to get to a 50/50 species count. Never, use a 100% stand of Kentucky bluegrass in most areas of Oklahoma because pure stands of Kentucky bluegrass in most of Oklahoma can get summer patch disease. Also, older Kentucky bluegrasses such as Park, Newport, South Dakota Common (SD Common), Kenblue and variety not stated (VNS =when there is not variety name stated) really don't bring any value to the cool-season mix. So if these are the only ones available locally, you might as well use 100% tall fescue. Most other varieties of Kentucky bluegrass that you might encounter (there are hundreds nationally, and yet few repeatedly available in OK from year to year) are improvements and will benefit the mix!

There is seldom any benefit and there is often detriment created by mixes of cool-season perennial grasses with annual or Italian ryegrass. Yet, if you scout the store shelves, you will find these mixes. Annual ryegrass simply competes with the cool-season perennial grasses in the

mix in the cool portion of the year when good growth can take place and then annual ryegrass, having taken its fair share of the lawn, dies out in the heat. This leaves uniformed consumer in a panic at worst and with unsightly dead areas in their remaining cool-season perennial lawn at best. Avoid mixes of annual ryegrass with the desirable cool-season perennials like tall fescue, perennial ryegrass and Kentucky bluegrass.

#### Soil Testing...the Right First Step

David Hillock

We all appreciate thick green lawns and lush productive gardens around the home. After all, attractive lawns and gardens add to both the aesthetic value and real value of our homes.

To achieve a high level of lawn quality and garden productivity, it is necessary to add fertilizer on a timely basis. When lawns and gardens don't receive the amount of fertilizer that they need, they never achieve the quality or productivity we anticipate. When too much fertilizer is applied, nutrients are wasted and pose a threat to the environment.

The true value of a **soil test** is to help insure that only needed nutrients are added in quantities which don't adversely affect environmental quality.

The best time to test the soil is during a time when plants aren't growing, although any time of year is satisfactory. In any case it is better to have the soil tested rather than guess which fertilizers to use and how much to apply. To make sure the test is accurate, sample the soil before fertilizer has been applied and follow proper collection procedures.

A soil test is only as good as the sample submitted for testing. Samples collected should represent the lawn or garden as a whole. The following steps will help in collecting good samples for submission.

- Scrape plant debris from the soil surface before sampling
- Sample lawns to a depth of 3-4". Sample gardens to a 6" depth.
- Use a clean bucket or other container and a soil probe or spade; collect cores or slices of soil from at least 10 different areas scattered throughout the lawn or garden and mix them together in the container.
- Mix soil thoroughly and fill the sample bag (bag can be obtained from your OSU County Extension Office) with a pint of the mixture.
- Submit samples and completed information sheet to your OSU County Extension Office. They will send samples in to the OSU Soil, Water, and Forage Laboratory for testing and then help you interpret the results.

The benefits of soil testing are many – it takes advantage of nutrients already in the soil, identifies nutrients that are lacking, reduces fertilizer applications, provides a proper balance of plant nutrients, allows adjustment of soil pH to an optimum level, and reduces chances of excess nutrients getting into the water sources.

For more information about soil testing contact your OSU County Extension Office or pick up the leaflet <u>L-429</u> Soil Testing...the First Right Step.

#### **Being Earth-Friendly**

David Hillock

Everything we do each day has an effect on our beautiful earth, landscaping and gardening is no exception. There are many little things we can do to protect our environment. Here are a few suggestions.

- Be more tolerant of minor surface imperfections on our fruits, vegetables and landscape plants. By doing so, we can significantly reduce the amount of pesticides used.
- Properly selecting and placing plants such as trees and shrubs around the home can significantly reduce our energy bills. Shade trees can help keep the inside temperature of the home lower longer during the summer. Evergreen windbreaks can reduce heating costs by as much as 15-30 percent in winter.
- Plant more trees and shrubs. There are many experts who believe that large-scale plantings of woody plants can help reduce the "greenhouse effect."

### **Upcoming Horticulture Events**

Turf and Landscape Field Day September 17, 2008, OSU Botanical Garden, Stillwater, OK

Tree Care Conference October 8, 2008, OSU Botanical Garden, Stillwater, OK

Greenhouse IPM Conference November 5, 2008, OSU, Stillwater, OK

Water Issues in Horticulture Conference December 4, 2008, Stillwater, OK

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or <a href="mailto:stephanie.larimer@okstate.edu">stephanie.larimer@okstate.edu</a>.