Horticulture Tips
August 2015

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

GARDEN TIPS FOR AUGUST!

David Hillock

Vegetables

- August is a good month to start your fall vegetable garden. Bush beans, cucumbers, and summer squash can be replanted for another crop. Beets, broccoli, carrots, potatoes, lettuce, and other cool-season crops can also be planted at this time. (HLA-6009).
- Soak vegetable seed overnight prior to planting. Once planted, cover them with compost to avoid soil crusting. Mulch to keep planting bed moist and provide shade during initial establishment. Monitor and control insect pests that prevent a good start of plants in your fall garden.

Fruit and Nut

- Continue protective insect applications on the fruit orchard. A good spray schedule is often abandoned too early. Follow directions on last application prior to harvest. (EPP-7319)

Flowers

- Towards the end of the month, divide and replant spring-blooming perennials like iris, peonies, and daylilies if needed.

General

- Water compost during extremely dry periods so that it remains active. Turn the pile to generate heat throughout for proper sterilization.
- Always follow directions on both synthetic and natural pesticide products.
- Watch for high populations of caterpillars, aphids, spider mites, thrips, scales and other insects on plant material in the garden and landscape and treat as needed. (EPP-7306)
- Water all plants thoroughly unless rainfall has been adequate. It is better to water more in depth, less often and early in the morning.

Trees and Shrubs

- Discontinue deadheading roses by mid-August to help initiate winter hardiness.
- Watch for second generation of fall webworm in late August/early September. Remove webs that enclose branches and destroy; or spray with good penetration with an appropriate insecticide.

Lawn and Turf

- Grassy winter weeds like *Poa annua*, better known as annual bluegrass, can be prevented with a preemergence herbicide application in late August. Water in the product after application. (HLA-6420)

- Areas of turf with large brown spots should be checked for high numbers of grubs. Mid-to-late August is the best time to control heavy white grub infestations in the lawn. Apply appropriate insecticide if white grubs are a problem. Water product into soil. (EPP-7306)
- Tall fescue should be mowed at 3 inches during the hot summer and up to 3 ½ inches if it grows under heavier shade. (HLA-6420)
- For areas being converted to tall fescue this fall, begin spraying out bermudagrass with a product containing glyphosate in early August. (HLA-6419)
- Irrigated warm-season lawns can be fertilized once again; apply 0.5 lb N/1,000 sq ft in early to mid-August.
- Brown patch of cool-season grasses can be a problem. (HLA-6420)

Fall Armyworm Reminder

Dustin K. Harris, M.S. Candidate in Horticulture Science and Justin Quetone Moss, Associate Professor

Although their migration to Oklahoma begins in late June, late July into August is the time when fall armyworms begin to cause more noticeable damage to bermudagrass, ryegrass, fescue, and bluegrass turf stands. In bermudagrass, which it prefers over the previously mentioned cool-season grasses, the damage frequently appears as medium to large patches of silvery grass. Upon further inspection, the damage can be observed mainly towards the leaf tips. Often times, one can inspect these areas in warm parts of the morning and easily observe the armyworms attached to the leaf blade. Although this pest is not overly problematic in established bermudagrass stands, it can devastate newly sodded stands.

To check for an infestation in a suspicious area:

- Irrigate the area if the soil is dry.
- Apply a solution of one ounce of liquid detergent per gallon of water per square yard of suspected area.
- Monitor the area (armyworms should begin to surface within 10 minutes).
- If more than 5 to 10 armyworms are observed, treatment with a pyrethrin insecticide is recommended.

Although these pests are often controlled by natural predators, mild springs and summers can often lead to problematic infestations.

Scheduling Your Turfgrass Water Needs by Visually Inspecting Your Lawn

Joshua Campbell

Warm-season lawn grasses such as bermudagrass may require as much as one inch of water per week during Oklahoma's hot summer months to maintain acceptable turf quality. However, many homeowners over irrigate their lawns which can lead to runoff and water waste.

Even if you have a home irrigation system that is set on a schedule, it is not a good idea to set it and forget it. The best way to determine if your lawn needs water is to visually inspect it. Once a week look at the overall appearance of your turf areas. As you assess the general appearance of the turf, look for signs of stress that indicate a need for irrigation or poor irrigation coverage. Look for signs such as wilting or failure to spring back after walking on it.

If there are no visual indicators of stress you can use a soil probe or screwdriver to feel the soil for moisture. If the screwdriver goes into the ground easily, there is no need to water. If the screwdriver will not easily penetrate more than one inch or provides heavy resistance, then it is time to water.

After irrigating, be sure to allow the soil to dry down again and use the screwdriver test to determine when irrigation becomes necessary.

Why We Don't Save Hybrid Seed

Lynn Brandenberger

Seed saving is a great way to help preserve Heirloom (open pollinated) varieties of vegetables, but saving seed of F_1 hybrids doesn't really work. I was recently reminded of this when some friends sent me a photo of a watermelon they grew from seeds that were saved from last year. The seed was from a standard red-fleshed watermelon and what they got was, well it wasn't red (Figure 1). What goes on with F_1 hybrids is that seed saved from the hybrid fruit will begin segregating genetically in the next generation i.e. the F_2 generation. That said, plants produced from seeds that have been saved from a hybrid variety are all segregating therefore you will have no idea what you will end up with i.e. now my friends have white fruited watermelon!

Figure 1.
Photo provided by Anne Pestamo

If you want to save seed from vegetables you will need to use an open-pollinated (not hybrid) varieties since they have been selected through multiple generations during segregation (8 to 9 generations) which means their genetics are very uniform and will give you what you are expecting when saving seed. Open pollinated (O.P.) varieties can include Heirlooms and also modern O.P.s. Depending on the crop species, some open pollinated varieties can perform as well as some hybrids.

Armadillo Control

David Hillock

The armadillo is one of the more interesting native mammals in Oklahoma. Unfortunately, they can cause substantial damage to lawns as they search for insects, grubs, and earthworms in the soil. They also dig up shallowly rooted annuals in flower beds. Damage is generally most

pronounced in the summer months as lawns are irrigated which makes the soil easier to forage in. Damage is easy to identify as it is noted by multiple shallow holes (Figure 1). Damage to rhizomatous grasses such as bermuda is typically manageable as healthy grass can quickly fill in bare patches. Cool-season grasses, such as fescue, are more problematic as the bare patches will need to be reseeded in the fall. Additionally, the extra irrigation required by cool-season grasses in the Oklahoma summer make them especially attractive to armadillo. The armadillo requires nearby cover that is generally woody thickets. Loose soils are much preferred for this burrowing animal. The armadillo appears to have expanded its range in recent years; however, it is often reduced in numbers in northern Oklahoma following prolonged cold. This is the only other mammal other than humans that is known to become infected with leprosy. While the probability of infections is likely low, it is not recommended to handle armadillos with bare skin.

Figure 1. Armadillo damage is typically small shallow diggings scattered throughout the lawn or in mulch. Tree squirrel and skunk damage can look similar.

Lethal Control – Armadillos are not protected in Oklahoma and may be trapped or shot year around. Shooting is an effective method where legal. However, as they are primarily nocturnal (particularly during the summer) this may not be a realistic control. Trapping is highly effective using a large 10 x 12 x 32-inch live catch trap. The smaller live catch traps designed for skunks are too small. Traps with doors on either end are most effective. Use some type of barrier to funnel the armadillo into the trap. Existing barriers such as fences, walls, etc. will work. If no existing barrier exists, use boards or temporary fence. The barrier only needs to be a few inches tall as armadillos rarely climb and will typically forage along any barrier they encounter (Figure 2). The trap does not need to be baited, although some homeowners have had success with rotten fruit or eggs. Place the trap either in the area of the landscape where damage is pronounced or where armadillos are entering the landscape (if known). As armadillos are often attracted to freshly irrigated lawns, consider placing traps in an area of the lawn immediately after irrigation. If damage is frequent, you can assume the animal has a burrow nearby in a wooded or riparian area. Once trapped, it is **NOT** legal to move the armadillo to another location. Transporting animals presents many problems such as disease transmission, displacement of existing wildlife, and stress on the animal moved. Thus, any trapped armadillo should be humanely killed with a shot to the base of the neck or in the head. Do not handle the armadillo to reduce potential of leprosy transmission.

Figure 6. Armadillos are generally easy to capture in a live-catch trap. While no bait is needed, the use of existing barriers and/or temporary barriers will greatly enhance capture. The idea is to create a funnel for the armadillo.

Repellants – There are no known repellants that are effective for armadillo.

Frightening – Frightening is not effective to reduce armadillo damage.

Exclusion – Exclusion is very effective to reduce armadillo damage to small garden beds. While armadillos can climb and burrow, they typically will not to access a small area. Fences > 12" should eliminate most armadillo use. For lawns, this will not typically be practical.

Habitat Modification – Removal of protective brush may reduce armadillo damage. However, this will change the aesthetics of the property and reduce use by many other species of wildlife that the gardener may wish to attract. Reducing irrigation can reduce damage.

Managing a Compost Pile

David Hillock

Compost systems can be simple and slow as a heap or pile, which is turned occasionally during the year. A more structured and complex system requires containers, more turning, and produces finished compost in a few months. In compost piles, water is added to green and brown vegetation layers.

As decomposed plant material, compost is an excellent soil amendment. Compost can loosen clay soils, help sandy soil retain moisture and nutrients, and retain soil moisture when used as mulch. Beneficial bacteria and organisms in compost assist plants in absorbing nutrients. Thus, natural materials are recycled in a home yard environment.

Below are some common questions about composting.

What is Compost?
Compost is a natural dark brown humus-rich material formed from the decomposition or breakdown of organic materials such as leaves, grass clippings, vegetation, vegetable food scraps, and twigs. Bacteria, worms, fungi, and insects need water and air to use the organic materials as food and decompose them.

What is the Procedure to Make Compost?
Organic materials are placed in alternating green and brown layers in a container, bin or pile. Alternating green and brown layers of material help assure the correct carbon and nitrogen amounts. With water and air, bacteria and insects use the materials as a food and energy source. The bacteria need water to live and grow. This process generates heat from 140 to 160 degrees F. Aeration is done by turning the container or pile of material. The more turning, the more air the bacteria have available, and the faster the process works. When the temperature decreases, the process is complete.

How is a Compost Bin Made?
Bins may be made in various sizes and with a variety of materials. The following easy steps describe compost pile construction:

1. Construct a confining perimeter with 3’ to 5’ diameter and 4’ high. Materials may be concrete blocks, railroad ties, wire mesh, boards, old pallets, other fencing material, barrel, or garbage can with holes for air
2. Layer green (wet) and brown (dry) vegetable matter (1 part green to 3 parts brown).
3. Wet thoroughly, then sprinkle with water periodically.
4. Turn every week to speed the decomposition process.

How Long Does it Take Compost to Form?
The time of completion will vary according to the type and amount of materials used, the climate, the size and type of bin or pile used, and the amount of aeration or turning of the pile. With the correct carbon to nitrogen ratio, water, and air, compost should be ready to use in 4 to 6 months. If the pile is turned more frequently, the compost should be ready more quickly. The smaller the individual pieces of material in the pile, the more surface area the microorganisms have to work on and the faster the materials will decompose. Shredding or chipping branches decreases the decomposition time.

When is the Compost “Done?”
Compost is ready when the temperature of the pile falls to ambient levels, the material is dark, crumbles easily, pieces are small and there is no odor.

How can the Process be Sped Up?
Mixing frequently provides more air for the bacteria. Keep the material moist with soaking about once a week. Break the materials into smaller pieces.

What can be Composted?
• Most yard waste such as grass clippings, leaves, twigs, excess vegetation
• Non- fat containing food scraps
• Twigs or chipped branches
• Coffee grounds, tea leaves

What cannot be Composted?
• Large branches
• Fatty foods and grease, meats, dairy products, fish
• Bones
• Synthetic products such as plastics
• Diseased plants
• Weeds and vegetables that produce abundant seeds
• Pet or human waste

Why Make Compost?
• Recycle natural materials
• Reduce amount of chemical fertilizer used
• Reduce amount of material going to landfills
• Reduce landfill tipping fees for individuals or communities
• Prolong landfill life

What can Compost be Used For?
• Improve soil structure and texture
• Increase water-holding capacity of sandy soil
• Loosen clay soil and improve drainage
• Add nutrients to improve soil fertility
• Aid erosion control
• Potting soil
• Mulch around shrubs to retain moisture

Upcoming Horticulture Events

GardenFest
September 26, 2015; 10 AM – 4 PM
The Botanic Garden at OSU – Stillwater, OK

Tree Care Issues Conference
October 29, 2015
Wes Watkins Center – Stillwater, OK

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