

Horticulture Tips

August 2012

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 3½ 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](#) & [HLA-6421](#))
- 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 Planting Guide

Table 1. Tender Vegetables - (harvest before frost*). Many varieties will do well – select varieties that are early maturing and disease resistant.

Kind	Time to plant	Method of Planting	Between Rows (inches)	In the Row (inches)	Depth to Cover Seed (inches)	Days from planting to Harvest
Beans, Bush	Aug. 10-20	Seed	18-24	3-6	1	50-60
Beans, Cowpea	July 15 – Aug. 1	Seed	18-48	6-12	1.5	75
Beans, Pole	July 15-30	Seed	24-36	12-18	1	60-70
Beans, Lima	Aug 10-20	Seed	18-24	4-8	1	70-80
Cilantro	July 15–Aug 1	Seed	9	4	.5	When plant is 4-6 in. tall
Corn, Sweet3	July 15	Seed	36	12-18	1	80-100
Cucumber	Aug 10-20	Seed or Plants2	36-32	12-30	.5 to .75	60-70
Eggplant	July 15	Plants	36	18	-	80-90
Pepper	July 15	Plants	36	24	-	90-110
Pumpkin	July 15-30	Seed or Plants2	36-60	30-48	1	100-120
Summer Squash	July 15- Sept. 1	Seed or Plants2	36	24-36	1	40-50
Winter Squash	July 15-30	Seed or Plants2	36-48	30-48	1	100-120
Tomatillo	July 15	Plants	48	24-36	-	90-100
Tomato	July 1–15	Plants	48	24-36	-	70-90

*Unless using a cold frame or row covers to extend the season.

1 = There may be advantages to planting earlier if soil moisture and climatic conditions are favorable.

2 = Set plants into the garden 1 to 1 1/2 months after planting the seed.

3 = Be vigilant about scouting for fall armyworms in whorl of seedlings and young plants.

Table 2. Semi-hardy vegetables - (may continue to grow and be harvested after several frosts). Many varieties will do well – select varieties that are early maturing and disease resistant.

Kind	Time to Plant	Method of Planting	Between Rows (inches)	In the Row (inches)	Depth to Cover Seed (inches)	Days from planting to Harvest
Beet	Aug 1-15	Seed	12-18	3-4	.5-.75	60-70
Broccoli	July 15- Aug 15	Plants	18-30	16-20	-	70-80
Brussel Sprouts	July 15- Aug 15	Plants	18-30	16-20	-	90-100
Cabbage	Aug 1-25	Plants	18-24	16-20	-	75-90
Chinese Cabbage	Aug 1-25	Seed or Plants ¹	12-16	10-18	.5	75-90
Carrots	July 15- Aug 15	Seed	12-18	1-2	.25	70-80
Cauliflower	Aug 1-25	Plants	18-24	16-20	-	70-80
Collards	Aug 1- Sept 1	Seed or Plants ¹	30-36	18-24	.5	75-85
Garlic	Sept 1-Oct. 15	Bulbs (cloves)	12	4	2	Early June the following year
Irish Potato	Aug 1-15	Seed potatoes	30-42	10-16	2	90-110
Kale	Sept. 1	Plants	24-36	18	-	50-65
Kohlrabi	Sept. 1	Plants	18-24	4-6	-	50-70
Leaf Lettuce	Aug 1-15	Seed or Plants ¹	12-18	2-3	.25	60-70
Leek	Sept. 1	Seed or Plants ¹	12-24	2-4	.5	Late spring the following year
Mustard	Sept. 10- Oct 10	Seed	12-18	2-3	.5	40-50
Onions	Sept. 1	Seed, Sets, or Plants ¹	12-18	4	.25	Late spring the following year
Parsnip	July 15-Aug 15	Seed or Plants ¹	12-18	4-6	.25	120
Peas, green	Aug 15-Sept. 1	Seed	36	2	2	60-90
Radish	Aug 15- Oct 10	Seed	8-12	.75-1	.5	20-40
Rutabaga	Aug 15- Sept 15	Seed	24-36	3-4	.5	80-90
Spinach	Sept 5-25	Seed	8-12	1-2	.5	50-60
Swiss Chard	Aug 1- Sept 15	Seed	24-30	2-3	.5	50-60
Turnip	Aug 1- Sept 15	Seed	12-24	2-3	.5	50-60

1 = Set plants into the garden 1 to 1 1/2 months after planting the seed.

Note: If planting or sowing into cold frames, plant two weeks later than date indicated. With our abundant winter sunshine, be sure to allow for ventilation. Also, check frequently for pests – especially aphids.

Hardcore Tomatoes

Lynn Brandenberger

Hardcore in tomato has been reported in some counties within the state. The two photos included in this article show the greenish white coloration around the core that develops from this condition. Normally when tomato fruit develops, it forms several locules (seed cavities) that eventually fill with seeds and a jelly like fluid. Older varieties of tomato have five distinct locules which join in the middle of the fruit to form the core. Newer varieties don't have the distinct locules that older varieties do. Under extreme environmental conditions and over fertilization, older tomato varieties will develop hardness in the core as shown in the photos.

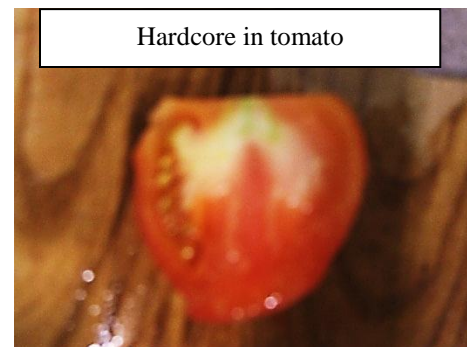


More information about hardcore can be found at:

Hard Core in Tomatoes, K-State Research and Extension Newsletter Horticulture '07, No. 33, August 15, 2007 (<http://www.hfr.ksu.edu/doc1917.ashx>)

Points mentioned in the article include the following:

- Don't over fertilize your tomato crop, see:
 - [HLA-6000 Fertilizing Commercial Vegetables](#)
- Select newer tomato varieties for production
- Reduce stress on the crop
 - Mulching
 - Proper watering
 - Shading
 - Manage insect & disease pests



Turf Drought Stress and White Grub Damage

Justin Quetone Moss and Eric Rebek

During late summer, irregular brown patches may show up in the lawn due to a combination of stress factors, chief among them a lack of sufficient water to the turfgrass plants. Such drought stress may be induced by inadequate management factors such as lack of irrigation water, uneven distribution of lawn irrigation or excessive thatch layer. Biotic factors such as insect damage and diseases can also contribute or exacerbate summer stress symptoms in the lawn.

The combination of drought stress and insect damage from white grubs can cause turf loss and unsightly brown patches in the lawn during August. White grubs refer to the larvae of certain species of scarab beetles (Figure 1). In Oklahoma, we see white grubs of May/June beetle (many species), southern masked chafer, and Japanese beetle. These species damage turfgrass by feeding directly on grass roots below the soil surface. If white grub populations are large enough, the turfgrass root system can be completely severed from the grass plant. Thus, turfgrasses with

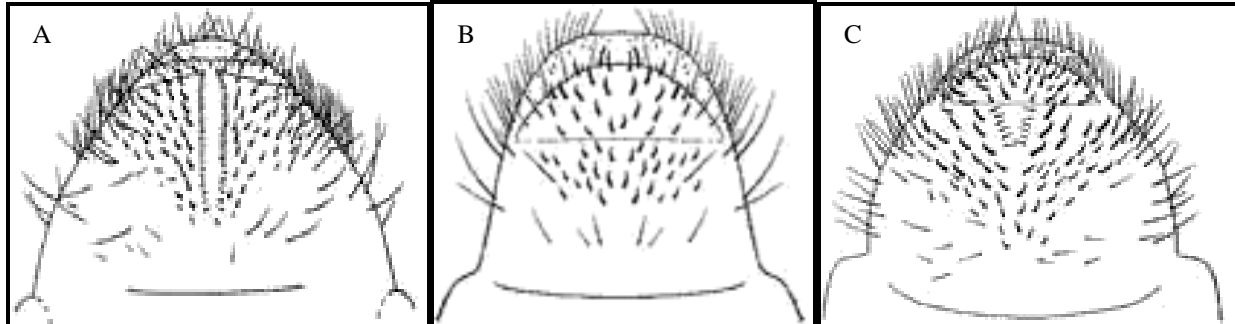
significant white grub damage can be easily pulled up from the ground, almost like a piece of new sod. Above ground, turfgrass leaf blades will turn brown and appear wilted. Severe white grub damage may be masked or confused with turfgrass drought stress during summer months. Certain species of white grub larvae become very active in August, especially those of southern masked chafer and Japanese beetle. In addition, August is typically an extremely dry month in Oklahoma. Therefore, initial damage to turfgrass roots from white grub larvae can be exacerbated by drought conditions, which can quickly lead to plant death.

Figure 1. White grubs in soil. Photo courtesy of Dr. Tom Royer, Professor, OSU Department of Entomology and Plant Pathology.



During August in Oklahoma, you may want to double check those brown patches in your yard for signs of drought stress and white grub damage. White grub populations should be monitored in areas where damage is suspected or has occurred historically by cutting and rolling back several blocks of turf measuring one square foot and counting the number of grubs encountered. For vigorously growing turfgrass, treatment may be warranted if an average of five or more May/June beetle white grubs are found per square foot. This treatment threshold increases to 20 grubs per square foot for southern masked chafer and Japanese beetle, which typically are smaller than May/June beetle white grubs in August. So, how do you tell the difference among these types of white grubs? You have to check the setal pattern (arrangement of hairs) on the bottom of the last abdominal segment (what we affectionately refer to as “counting butt hairs”). May/June beetles have two central, parallel rows of spine-like hairs that resemble a zipper, masked chafers have a random distribution of hairs, and Japanese beetles have a distinct V-shaped pattern of hairs (Figure 2).

Figure 2. Arrangement of setae (hairs) on bottom of last abdominal segment for white grubs of (A) May/June beetle, (B) masked chafer, and (C) Japanese beetle. Note the two central, parallel rows of hairs in (A), the random distribution of hairs in (B), and the V-shaped arrangement of hairs in (C).



If you believe you have a white grub problem in your yard, contact your local OSU County Extension Educator for treatment and management options.

Blister Beetles

Kim Toscano and David Hillock

A lot of people have been asking about Blister Beetles (*Epicauta pennsylvanica*) recently. These rather large native beetles (adults range from 1/2 to 1 inch long) have a characteristic narrow, elongate, soft body with a head wider than the pronotum. The flexible wing covers are rounded over the abdomen. Colors vary with species and range from black to gray to brown, some with conspicuous orange stripes or other patterns.



Their name derives from the fact that adults produce a toxin (cantharadin) that can cause blisters to form on the skin. But gardeners are more concerned about the plants whose leaves the beetles are stripping. The adult beetles feed on many different garden plants, particularly legumes, eating foliage and flowers. The adults generally appear in large groups or swarms, and can be quite a problem in the garden.



Before we decide to kill off these bothersome beetles, we might consider the fact that the larvae of these beetles are predaceous and feed on grasshopper eggs. But if that is not enough to convince you to spare them, then let's look at a few management options.

Hand-picking the beetles can be rather unpleasant, because the toxin in the beetles' bodies can irritate the skin. It is better to shake them into a pan of soapy water. Blister beetles often drop to the ground and play dead when disturbed, so you may have to pick up a few from the ground. Be sure to wear a pair of gloves to keep the cantharadin off your skin.

Some gardeners have grown calendula as a trap crop or left a few pigweeds (*Amaranthus* species) growing in the garden. Both of these plants are highly attractive to the blister beetles. If you prefer a chemical approach, there are a few insecticides labeled for control of blister beetles including those with carbaryl (Sevin), malathion and pyrethrin as the active ingredient. Multiple applications may be needed as adult blister beetles are migratory and others may visit the garden.

Dividing Perennials

David Hillock

Most perennials left in the same place for more than three years are likely to be overgrown, overcrowded, have dead or unsightly centers and in need of basic feeding and soil amendment. The center of the clump will grow poorly, if at all, and the flowers will be sparse. The clump will deplete the fertility of the soil as the plant crowds itself. To divide mature clumps of perennials, select only vigorous side shoots from the outer part of the clump. Discard the center of the clump. Divide the plant into clumps of three to five shoots each. Be careful not to over-divide; too small a clump will not give much color the first year after replanting. Divide perennials when the plants are dormant, just before a new season of growth, or in the fall so they can become established before the ground freezes.



Stagger plant divisions so the whole garden will not be redone at the same time; good rotation will yield a display of flowers each year. A good general rule to follow is to divide perennials opposite their flowering time – spring-blooming in late summer or fall, and summer/fall-blooming in the spring. Do not put all the divisions back into the same space that contained the original plant. That would place too many plants in a given area. Give extra plants to friends, plant them elsewhere in the yard or discard them.

Pruning Shrubs as Hedges

David Hillock

Hedges are a row of plants that merge into a solid linear mass. They have served gardeners for centuries as screens, fences, walls, and edging. A well-shaped hedge is no accident. It must be trained from the beginning.

Establishing a deciduous hedge begins with selection of nursery stock. Choose young trees or shrubs one to two feet high, preferably multiple-stemmed. When planting, cut the plants back to

six or eight inches; this induces low branching. Prune off half of the new growth late in the first season or before bud-break in the next season.

The following year, again trim off half. In the third year, start shaping. Trim to the desired shape before the hedge grows to its desired size. Never allow plants to grow untrimmed to the final height before shearing. By that time, it is too late to get maximum branching at the base. Do not allow lower branches to be shaded out. After the hedge has reached the desired dimensions, trim closely in order to keep the hedge within chosen bounds.

Evergreen nursery stock for hedging need not be as small as deciduous material and should not be cut back when planted. Trim lightly after a year or two. Start shaping as the individual plants merge into a continuous hedge. Do not trim too closely because many needle-bearing evergreens do not easily generate new growth from old wood.

Hedges are often shaped with flat tops and vertical sides; however, this unnatural shape is seldom successful. As far as the plant is concerned, the best shape is a natural form, with a rounded or slightly pointed top and with sides slanting to a wide base (Figure 1).

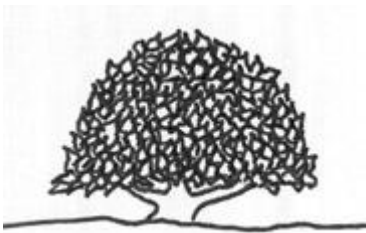
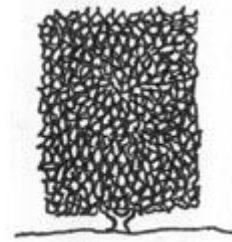
Figure 1. Hedge shapes.



Snow accumulates on broad flat tops



Straight lines require more frequent trimming



Peaked and rounded tops hinder snow accumulation

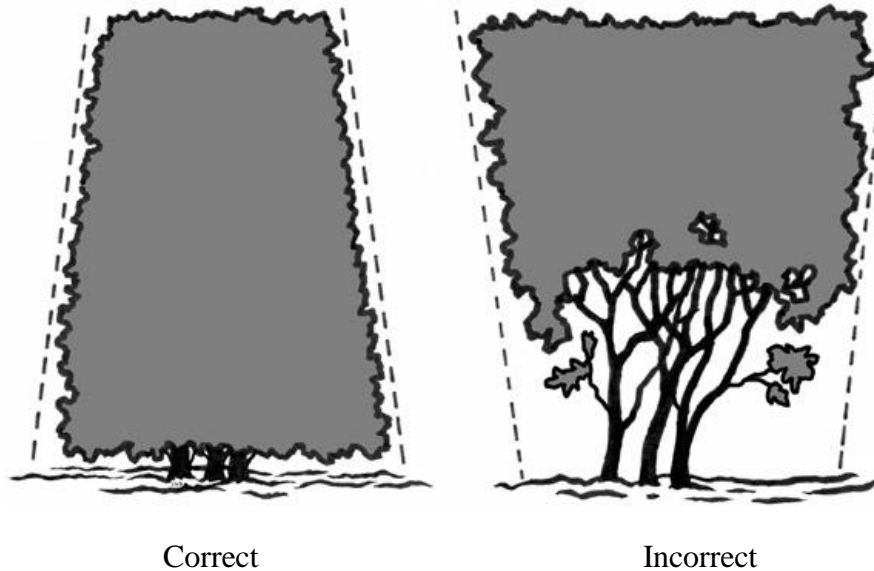


Rounded forms, which follow nature's tendency, require less trimming



After plants have been initially pruned to induce low branching, maintain by trimming the top narrower than the bottom so that sunlight can reach the base of the plant (Figure 2).

Figure 2. Proper hedge pruning.



This question often arises – How often and when should a hedge be trimmed? Answers depend to some extent on how formal an appearance is desired. In general, trim before the growth exceeds one foot. Hedges of slow growing plants, such as boxwood, need to be trimmed sooner. Excessive, untrimmed growth will kill lower leaves and will also pull the hedge out of shape. Trimming frequency depends on the kind of shrub, the season, and desired neatness.

What can be done with a large, overgrown, bare-bottomed, and mis-shaped hedge? If it is deciduous, the answer is fairly simple. Before leaves appear in the spring, prune to one foot below desired height. Carefully trim for the next few years to give it the desired shape and fullness. Occasionally, hedge plants may have declined too much to recover from this treatment, making it necessary to replace them.

Rejuvenating evergreen hedges is more difficult. As a rule, evergreens cannot stand the severe pruning described above and may have to be replaced.

Tools – The traditional pair of scissor-action hedge shears is still the best all-round tool for trimming hedges. It cuts much better and closer than electric trimmers that often break and tear twigs. Hand shears can be used on any type of hedge, while electric trimmers do poorly on large-leaved and wiry-twiggled varieties, and sometimes jam on thick twigs. Hand shears are also quieter, safer, and less likely to gouge the hedge or harm the operator.

Hand pruners are useful in removing a few stray branches and are essential if an informal look is desired. Large, individual branches can be removed with loppers or a pruning saw. Chain saws are not recommended for use on hedges.

Upcoming Horticulture Events

Plant Materials Conference

August 28, 2012 – Wes Watkins Center – Stillwater, OK

http://www.hortla.okstate.edu/events/pdf/2012_Plant_Materials.pdf

Turfgrass, Landscape and Nursery Field Day

September 12, 2012 – The Botanic Garden at OSU – 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.