

Horticulture Tips

August 2003

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. (F-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. (F-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 worms, aphids, spider mites, thrips, scales and other insects on plant material in the garden and landscape and treat as needed. (F-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 2nd 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. (F-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. (F-7306)
- Tall fescue should be mowed at 3 inches during the hot summer and up to 3 1/2 inches if it grows under heavier shade. (F-6420)
- For areas being converted to tall fescue this fall, begin spraying out bermudagrass with a product containing glyphosate in early August. (F-6419 & F-6421)
- Irrigated lawns can be fertilized once again. If you have had a problem with spring dead spot in your bermuda lawn, this should be your last application of fertilizer for the year.
- Brown patch of cool-season grasses can be a problem. (F-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, Sweet ³	July 15	Seed	36	12-18	1	80-100
Cucumber	Aug 10-20	Seed or Plants ²	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 Plants ²	36-60	30-48	1	100-120
Summer Squash	July 15- Sept. 1	Seed or Plants ²	36	24-36	1	40-50
Winter Squash	July 15-30	Seed or Plants ²	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

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.

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

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.

Recommended reading: “The New Organic Grower’s Four-Season Harvest” by Eliot Coleman, Chelsea Green Publishers.

Dean McCraw

Dr. Dean McCraw retired July 31, 2003 from the Department of Horticulture and Landscape Architecture. He has been in our department since 1985 and provided leadership for statewide research and Extension programs in vegetables, pecans and tree fruits. We thank him for his dedication to making the pecan and tree fruit program a great success and wish him the best in his retirement.

Due to Dr. McCraw's vacancy, we will no longer be fully serving the commercial small and tree fruit areas. The only exception to this is that commercial strawberries will still be handled by Dr. Lynn Brandenberger. Consumer horticulture small fruits and tree fruits inquiries will be handled by David Hillock. Insect and disease questions can be answered by the Department of Entomology and Plant Pathology at OSU.

Extension inquiries related to commercial pecan production will now be handled by Becky Carroll. David Hillock will still handle consumer pecan inquiries.

Help! Weeds are Taking Over the Garden

David Hillock

If you have been on vacation or just not had time to get into the garden this summer, especially with the 100-degree weather we have had, your gardens may be overrun with weeds. It doesn't take long in Oklahoma for weeds to take control and create a real headache. Weeds in the flower and vegetable garden compete for nutrients, soil moisture, sunlight and space with desirable plants. By this time of year we are more likely to throw our hands into the air and walk away from it all. However, don't despair because it is possible to regain control.

If your annual flowerbed or vegetable garden is going downhill fast, then you may consider starting over by killing everything in the garden bed. If you still have desirable plants that you want to save, then a different approach may be necessary.

If you are willing to sacrifice what is left of the flowers and vegetables for sake of gaining control, then you can spray the garden with a product containing glyphosate, such as Roundup, Kleenup, Kleeraway, etc. Glyphosate is a non-selective herbicide that will kill both grass and broadleaf plants. It breaks down quickly and is not active in the soil so you can replant in the area within a reasonable amount of time following treatment. Apply while weeds are actively growing for best results.

If you wish to save some of the plants in the garden then you will need to determine what types of weeds you have. If they are broadleaf weeds such as dandelion, spurge, etc., then you are somewhat out of luck unless you want to pull them by hand. There are no postemergence, broadleaf herbicides available as over-the-top sprays that can be used in the ornamental or vegetable garden that won't damage or kill your desirable plants. If the weeds are grasses, then you have some choices.

Two chemicals, sethoxydim (Poast, Grass Getter, etc.) for use on ornamentals and certain vegetables and fluazifop-p-butyl (Grass-B-Gone, Grass-Out, etc.) for ornamentals, are available as over-the-top sprays that will kill grassy weeds but not the desirable plants. However, like most pesticides, some damage may occur to some plant species, so it is best to read the label and make sure it is safe to use on your particular crops in your particular situation before purchasing.

Next spring, and possibly even this fall, you will want to use a preemergence herbicide to control any weed seeds left in the garden, if you are not planning on starting new plants by seed. In most cases, if you are starting your garden by seed, preemergence herbicides can be used, but only after your plants have germinated and become well-established seedlings. A product containing trifluralin (Preen) is available for use in ornamental and vegetable beds. More than one application may be needed to provide season long control.

Once you have gained control again of your garden, it shouldn't be as difficult to maintain. Staying on top of and new weeds that pop up by occasional hand pulling, light cultivation and the use of mulches should ensure a healthier, more productive garden in the future.

Attracting Birds to Landscapes and Outdoor Areas

David Hillock

Attracting birds to landscapes and outdoor areas is an activity that can bring much enjoyment to the entire family. Landscaping and gardening for birds is gaining in popularity as people become more aware of the benefits of having a diverse environment around them. Bringing these beautiful creatures near homesites also helps manage insect populations and maintain the ecological balance of outdoor environments.

Birds need three things to survive — food, water and shelter. These elements can easily be supplied in your backyard. One of the key elements for attracting many species of birds is a wide variety of plants arranged into sheltered areas of shrubs and trees, open areas of lawns and gardens, and/or wet areas around ponds and streams.

Gardeners and landscapers should be aware that the predominant habitat type in the area will determine which bird species can be attracted to a yard. For example, if the entire neighborhood is heavily wooded, purple martins will be difficult or impossible to attract. On the other hand, areas with many tall, mature trees will have numerous birds, such as some of the owls, vireos, and warblers, that open areas may not attract. Some species such as the cardinal and mockingbird require shrub cover. In particular, if you have a new house in a recently built residential area, give the yard time to mature. As the shrubs and trees grow, so will the number of birds in your yard. New areas with few mature trees and little shelter for birds will take several years to become hospitable places for birds requiring trees and shrubs.

Seven Steps to Landscaping Your Yard for Wildlife

1. Set your objectives and priorities. Decide which types of birds or other animals you may feasibly attract given the habitat surrounding your yard and already in place (for example,

whether the area is open, forested, etc.). Organize your landscape design accordingly using plants that you know will work best for you.

2. Draw a map of your property. A map will help determine how much available space you have and other features about your yard. A map can help you experiment with different designs, keeping in mind those areas that are shady, sunny, wet, dry or scenic.
3. Review the basic needs of birds (food, water, shelter, cover) and determine those components already present in your yard and those that may be lacking. Check the tables for listings of plants to determine which plants are appropriate for your area that you may want or need to obtain. Realize that while your yard and garden may not provide all of the necessary components, your neighbor's yards may contain some of these. Emphasize native plants!
4. Check with natural resource professionals and various reference books at your library or bookstore for practical tips.
5. Develop a planting plan. It is important to draw shrubbery and trees at full or mature size to plan for space needs. Determine how much money you are willing to spend. Realize that you do not have to plant it all in one season. Use native plants where possible.
6. Implement your plan. Shop local nurseries and garden centers as well as catalogues of plant and seed suppliers to determine the availability of plant materials. Keep records of your expenses and take pictures as your plan develops.
7. Maintain your plan. This involves watering, fertilizing, pruning, weeding and mowing. Remember, native plants will be more forgiving of lack of care and will require less maintenance than exotics. Maintaining nest boxes and feeders on a regular basis is also necessary.

Further Wildlife Enhancements

1. Leave as many thick, dead branches and tree trunks (snags) in your landscape as possible. Woodpeckers, chickadees, warblers, nuthatches, and brown creepers will look for insects on them. Other birds can use the cavities in dead wood for homes. Safety of the trees must be considered, too.
2. Place short pieces of yarn (4 to 6 inches), hair, or the feathers from an old feather pillow in the yard. Birds will use the material for their nests.
3. Keep a small area of your garden muddy for robins and swallows to use for making their mud nests.
4. Minimize the use of chemicals in your yard. The more insects around the yard, the more birds you will have. Try to remove problem insects by hand. Some insects can be ignored without damaging plants too much. Most plants can tolerate some insect or disease damage without harmful effects.

5. If you have a cat, keep it indoors as much as possible. Keeping the cat inside all the time would be best. Cats are very efficient predators and can kill numerous birds each day, generally more than the owner realizes. Encourage your neighbors to keep their cats inside or to use collars with bells.

Open, dry, dusty areas are great for birds to use as dust baths. Leave a small area of the garden unplanted and dry to make a dust bath. Stir up the soil occasionally to get it started. A pile of sand or crushed egg shells nearby can also serve as grit for birds that need it for digestion of food.

Additional Information

For more detailed information on food, water, shelter, nesting boxes and plant material recommended to attract birds, see OCES Fact Sheet F-6435 Landscaping and Gardening for Birds at <http://pearl.agcomm.okstate.edu/hort/ornamental/f6435.htm>.

Inquire about Oklahoma's Backyard Certification Program through:

Nongame Wildlife Program
Oklahoma Department of Wildlife Conservation
1802 N. Lincoln Blvd.
Oklahoma City, OK 73105
(405) 521-4616
<http://www.wildlifedepartment.com/>

The National Wildlife Federation
1412 16th St., N.W.
Washington, DC 20036-2266
(800) 432-6564

Oklahoma Partners in Flight
"Make Every Home a Habitat" Program
7412 W. 38th St.
Tulsa, OK 74107

HUMMINGBIRDS

Of all of the hundreds of bird species, hummingbirds are particularly interesting and delightful to attract to the yard. These tiny, energetic birds can provide hours of enjoyment through their dazzling flying abilities, acrobatics and bold personalities. In addition, hummingbirds are often as brightly colored as jewels.

The hummingbird is the smallest native bird in North America, length totaling about 3 1/2 inches overall. Its weight is only about 1/4 of an ounce. Hummingbirds are identified by the extremely rapid movement of their tiny wings that creates a humming sound as they fly or hover. The average wingbeat of a hummingbird in flight is 55 strokes per second.

Hummingbirds are unique in their method of feeding, which requires them to extract nectar from blossoms using their long, split, retractable tongue. Contrary to popular belief, hummingbirds do not use their tongues as humans would a straw, but rather, exhibit a licking motion at a rate of about 13 licks per second. Their tongues have tiny fringes along the split edges that help with the ingestion of small insects trapped in nectar. Hummingbirds also capture small insects flying about in the air, especially when raising their young.

Male hummingbirds exhibit their most dramatic display of color and behavior during courtship and defensive displays. In these displays, the male will ascend to varying heights and then dive straight down toward the object of his affection or irritation. His wingbeat will sometimes increase to up to 200 beats per second, which creates both a loud humming sound and a wonderful visual display of his iridescent feathers.

All North American hummingbirds are migratory except the Anna's hummingbird which remains in California. The two species of hummingbirds most frequently seen in Oklahoma are the two that migrate the farthest distance each year. These are the ruby-throated and the less frequently occurring rufous hummingbirds which may travel 2,000 miles or more. For the ruby-throat, 500 of those miles are nonstop over the Gulf of Mexico. In order for the ruby-throated hummingbird to sustain itself for the journey, it must accumulate about half of its normal body weight in fat. These trips are made individually and not in flocks or small groups. In addition to the ruby-throated and rufous hummingbirds, the black-chinned and broad-tailed hummingbirds can be seen, although rarely, in the western part of the state.

To fulfill their nutritional requirement, hummingbirds rely on the protein found in small insects trapped in the sticky nectar that they ingest from flowers. This protein is especially important for the feeding of young. Last, hummingbirds depend upon body temperature for the ability to fly. Hummingbirds cannot fly if their body temperature is below 86° Fahrenheit.

Frequently Asked Questions About Hummingbirds:

Question: Should I use commercially prepared food or can I make my own? And does the food need dye to attract the hummingbird?

Answer: You can prepare your own as opposed to purchasing a solution already made. The solution that is closest to natural nectar is 1 part sugar to 4 parts water. Boil the water, stir in the sugar, and allow the solution to cool before filling your feeders. Store any left over solution in the refrigerator. You don't need to add red dye. All hummingbird feeders have enough red to attract the hummers. Also, red dye may be toxic to hummingbirds. You don't need to add anything else to your solution. Hummingbirds eat insects for protein.

Question: When should the hummingbird feeder be taken down? I have heard that if left up too late in the year, the hummingbirds may not migrate and could die.

Answer: There is no evidence that leaving your feeder out too late will delay hummingbird migration. Most hummingbird experts say that migration is triggered by the changing length of daylight hours and/or by the availability of insects. (There are a few who still argue that when

feeders are left up beyond normal migration time it can delay hummers while food supplies to the south diminish). We recommend that you take down your feeders when it becomes apparent that there are no more hummingbirds in the neighborhood. Most hummingbirds in Oklahoma will migrate for winter, but it is possible to have a Rufous Hummingbird or some other western species show up in the fall, then linger indefinitely. If any hummingbird stays beyond the usual time, keep feeding it. It may be sick, injured or lost. The tiny bird's survival could depend on your generosity.

Upcoming Horticulture Events

Tree Symposium

This Year's Theme: You're Gettin' Shade all Over my Grass: Insights into the Integrated Management of Woody Ornamentals Where Turf is of Predominant Importance

September 12, 2003

Oklahoma City

Contact Carroll Emberton for more information at ohic@ionet.net

Multi-State Ornamental Plant Materials Conference

September 24-25, 2003

Holiday Inn, Stillwater

Contact Mike Schnelle at mas@okstate.edu

Tree Care Conference

October 14, 2003

Oklahoma Botanical Garden and Arboretum, Stillwater

Contact Mike Schnelle at mas@okstate.edu

Greenhouse Growers' Fall Seminar

October 21, 2003

Holiday Inn, Stillwater

Contact Carroll Emberton at ohic@ionet.net

<http://www.ogga.org/education.htm>

Hazard Trees and Trees People and the Law

November 5-6, 2003

Reed Conference Center, Midwest City

Contact Mark Bays for more information at 405-521-3864 or mark@oda.state.ok.us

Horticulture Therapy Conference

November 12, 2003

Holiday Inn, Stillwater

Contact Mike Schnelle at mas@okstate.edu

Oklahoma Nursery and Greenhouse Trade Show and Convention

January 15-17, 2004

Cox Convention Center, Oklahoma City
Contact Carroll Emberton at 405-942-5276 or ohic@ionet.net
<http://www.okmurserymen.org/>

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