

Horticulture Tips

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

GARDEN TIPS FOR JUNE!

David Hillock

General Landscape

- Find someone to water plants in the house and garden while on vacation. Harvesting vegetables and mowing the lawn are a must and imply that someone is home.
- Mulch ornamentals, vegetables, and annuals to reduce soil crusting, and to regulate temperatures and moisture during hot summer months. Mulching will reduce about 70 percent of the summer yard maintenance.
- Remain alert for insect damage. Add spider mite to the list. Foliage of most plants becomes pale and speckled; juniper foliage turns a pale yellowish color. Shake a branch over white paper and watch for tiny specks that crawl. Watch for first generation fall webworm. ([EPP-7306](#))

Turfgrass

- Fertilize warm-season grasses at 1 lb. N per 1,000 square feet. Don't fertilize fescue and other cool-season grasses during the summer.
- Dollar spot disease of lawns can first become visible in mid-May. Make certain fertilizer applications have been adequate before applying a fungicide. ([EPP-7658](#))
- Seeding of warm-season grasses should be completed by the end of June (through July for improved varieties such as Riviera and Yukon) to reduce winterkill losses. ([HLA-6419](#))
- Brown patch disease of cool-season grasses can be a problem. ([HLA-6420](#))
- White grubs will soon emerge as adult June Beetles. Watch for high populations that can indicate potential damage from later life cycle stages as grubs in the summer.

Fruit and Nut

- Renovate overgrown strawberry beds after the last harvest. Start by setting your lawnmower on its highest setting and mow off the foliage. Next thin crowns 12 to 24 inches apart. Apply recommended fertilizer, preemergence herbicide if needed and keep watered.

Trees and Shrubs

- Vigorous, unwanted limbs should be removed or shortened on new trees. Watch for forks in the main trunk and remove the least desirable trunk as soon as it is noticed. ([HLA-6415](#))
- Pine needle disease treatments are needed again in mid-June. ([EPP-7618](#))
- Remove tree wraps during the summer to avoid potential disease and insect buildup.
- Softwood cuttings from new growth of many shrubs will root if propagated in a moist shady spot.

- Protect trees from lawnmowers and weed eaters by mulching or using protective aerated covers.

Flowers

- Pinch back leggy annuals to encourage new growth. Fertilize and water appropriately.
- Feed established mums and other perennials.
- When picking fresh roses or removing faded ones, cut back to a leaflet facing the outside of the bush to encourage open growth and air circulation.
- Stake tall perennials before toppling winds arise.

Redbud Leaffolder, *Fascista cercerisella*

David Hillock

Recently we've had many inquiries about redbud leaves appearing brownish and all rolled up. If you inspect the leaves carefully you will find a caterpillar all wrapped up inside. If you unfold the leaf, a caterpillar scurries off the leaf, often hanging from a silken thread or dropping to the ground; the culprit, the redbud leaffolder.

In Oklahoma this insect often causes severe damage to the foliage of redbuds, but rarely kills a tree. The characteristic injury is folding the edge of the leaf onto the upper surface and fastening it down with strands of silk. Where the infestation is heavy there may be from two to four folded areas on a leaf. Leaves may also be tied to each other or to nearby surfaces. In the folded areas the larvae feed on the upper surface layer of the leaf. This brings about the drying out of the leaf and it turns brown. When the damage is severe the leaves die and drop from the trees.



The adult is a small moth. The eggs are oval, white, and very small. Small larvae are white, but during the latter part of the next to last instar, dark alternating cross bands appear. The mature larva has alternating white and black bands and is about 1/2 inch long. The dark brown pupa is held to a leaf by a sparse, loosely made web.



The redbud leaffolder overwinters as a pupa attached to a fallen leaf. They may become detached from the leaf and come to rest in debris or on the surface of the soil. Adults emerge in late April and early May and lay eggs on the leaves near the veins during May. The first generation continues through June. Second and third generation eggs are laid in a thin web in a folded leaf. The second generation occurs in late July and August and the third in September and early October. The third generation overlaps the second in the fall. During rainy weather a fungus disease sometimes attacks and kills the larvae.



The first step to control is sanitation, gathering leaves as they drop from the tree, especially in the fall, to remove overwintering pupae. If there are only a few on the tree they can be handpicked or merely squished while they are still folded up in the leaf. Insecticides may provide satisfactory control as long as you catch the caterpillars early in the season while they are still young and not completely folded up in the leaf. Once they wrap themselves up in the leaf they are protected.

Insecticides that may provide control are those containing carbaryl, esfenvalerate, insecticidal soaps, malathion, neem oil, spinosad, and *Bacillus thuringiensis* var. *kurstaki* (B.t.). These are contact insecticides or must be ingested by the larvae to be effective, that is why it is difficult to get good control with this type of insect and why timing is critical. B.t. is a bacterial insecticide that specifically targets larvae in the moth and butterfly family. When larvae ingest B.t. they stop feeding, but the larvae don't die right away. Systemic products would be more effective, but the only one readily available to the homeowner is acephate and it is not labeled for use on redbud. Using products containing acephate on redbud could result in tree damage.

Mulch, an Integrated Pest Management (IPM) Tool

Kim Toscano

Gardeners apply mulch for a variety of reasons. Chief among those is aesthetics; a mulched garden looks tidier and more attractive. Mulch also provides a number of services to the garden and is an important part of maintaining plant health in a comprehensive IPM program.

When it comes to plant pests, mulch can act as a barrier against certain pests. A layer of mulch prevents weed growth by limiting the amount of light available for seeds in the soil to germinate and also by smothering small weed seedlings. Mulch also prevents air-borne seeds from taking hold in the soil.

Mulch protects plants from soil-borne diseases by preventing rainfall and irrigation water from splashing pathogens onto the plants. In the same way, it can keep fruits like strawberries and tomatoes clean by preventing mud from splashing up onto fruits during a rain event.

Mulch also protects soils, reducing soil compaction from the impact of heavy rains or foot traffic, as well as reducing erosion due to wind and rain.

Many of the effects of mulch lend support to plant growth. Mulch helps regulate soil temperature by shading it in the summer to keep it cooler and also provides insulation in the winter from chilling winds. This temperature regulating effect helps encourage the root growth of plants. Mulch also reduces moisture loss from the soil by preventing evaporation from sunshine and desiccating winds.

Mulch can also prevent damage to trees and bushes by protecting their stems and surface roots from damage by mechanical garden tools such as weed whackers, edgers, and lawn mowers.

Finally, mulch provides a home for earthworms and natural enemies found in the soil. Insects, spiders, and centipedes seek shelter beneath litter on the soil surface. Mulch provides ample places for these arthropods to hide during the day. These predators will feed on a variety of garden pests during the cooler night hours.

Ground beetles, or carabids, are an abundant generalist predator that benefits from mulches. Most are nocturnal and feed on a wide variety of prey including caterpillars, snails, aphids, maggots, and other beetles. Lift a rock or move aside the mulch in your garden and you are likely to see a ground beetle scurry away. There are hundreds of species, most with dark brown or black shiny and hardener wing coverings. The larvae are dark brown with a large head, mandibles for snatching prey, and a tapered body.

Another beetle that thrives in mulch is the rove beetle, which includes thousands of species in the insect family Staphylinidae. They feed on small insects, mites, snails, and insect eggs. The adults are easily recognized by their slender bodies and shortened wings. They often curl the tip of their abdomen up when disturbed.

A variety of spiders also benefit from mulches. While many gardeners cringe at the site of spiders, they are wonderful predators and a great benefit to have in the landscape. Wolf spiders are one type of hunter you find on the ground. Centipedes will also take shelter under mulch. They are another less unloved animal, but a generalist predator like spiders, and a benefit to the garden.

Mulch can be broken into two main categories: organic mulches, which are derived from natural materials, and inorganic mulches, composed from synthetic or man-made materials, mainly plastic or aluminum.

Organic mulches are by far most common in an ornamental garden. These include cut grasses, leaves, straw, hay, wood chips, bark, animal manures, plant debris or newspapers. Organic mulches decompose over time, adding organic matter to the soil and improving soil conditions. Organic matter loosens soils, which improves the root growth, increases the infiltration of water, and also improves the soil water holding capacity. Decomposed mulch contributes nutrients to the soil that can be utilized by plants.

Inorganic mulches include plastic and aluminum foil. These are not often used in a home landscape, but can be beneficial in the vegetable garden. Different colored mulches are used to control a variety of pests. Reflective, aluminum mulch reflects sunlight and confuses and repels flying insects from coming onto the plants. Studies show that red plastic mulch repels root maggots and other flies, while blue reflection confuses winged aphids and thrips. Black plastic mulch discourages sowbugs and other crawling pests that cannot withstand the heat and also helps in managing leafminers. However, you must do your own study as the pests from different regions react differently to various colors.

Experiment with different types of mulch in the landscape to find what works best in your unique environment, and look beneath the mulch to see who is making a home in your garden.

Rattlesnake Master

David Hillock

Not too long ago we planted a great perennial in our Xeriscape Garden at the *Oklahoma Gardening* studio. I have patiently waited for it to become established and really put on a good show. The perennial is Rattlesnake master, *Eryngium yuccifolium*; even the name is quite intriguing.

Rattlesnake master is a native perennial to the tall grass prairie and is found generally in wet or dry prairies and open woods in the southeast U.S. With its stiffly erect growth habit, bluish green, long linear leaves with bristly edges resembling those of yucca, and a tight head of tiny greenish flowers with white bracts sticking sharply out of each flower resembling a thistle, this plant really stands out in the crowd. Though the overall appearance is thistle-like, rattlesnake master is actually in the carrot family (Apiaceae). *Eryngium* is Greek for “prickly plant” and *yuccifolium* is Greek for “yucca leaves.” Plants grow 2 to 6 feet tall from a short, thick rootstock.



The root of rattlesnake master has been used medicinally by Native Americans and pioneers to treat various maladies. The common name actually comes for the old belief that the roots could be used to treat rattlesnake bites, though there is currently no scientific evidence to support the claims.

Rattlesnake master can be used for roadside plantings, prairie restoration, prairie landscaping, wildlife cover, and also in wildflower gardens because of its excellent texture.

Upcoming Horticulture Events

Plant Materials Conference

August 28, 2012 – Wes Watkins Center – 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.