

# Plant Wise

IOWA STATE UNIVERSITY  
University Extension

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## Deadheading Herbaceous Ornamentals and Roses

By Richard Jauron  
Department of Horticulture  
Iowa State University

The removal of spent flowers (deadheading) on annuals, perennials, and roses is an important gardening chore.



Deadheading improves the appearance of many plants, encourages the formation of additional blooms, and prevents the development of unwanted fruits or seed pods.

Annuals - Pinch off the faded flowers on annuals, such as petunias, geraniums, marigolds, zinnias, cosmos, pansies, and snapdragons, on a regular basis to prevent seed formation and promote flowering. Impatiens and a few other annuals are self-cleaning and don't require deadheading.

Perennials - The flowering period of many perennials, such as coreopsis, garden phlox, shasta daisy, and yarrow, can be prolonged by deadheading. Delphiniums often bloom a second time in late summer if the initial flower stalks are cut back after flowering. The removal of spent flowers on peonies and bearded irises promotes plant vigor by preventing the formation of seed pods. Deadheading also prevents the self-seeding of golden marguerite, yarrows, and other potentially invasive perennials.

Roses - Modern roses, such as hybrid teas, grandifloras, and floribundas, should be deadheaded to conserve the plant's energy and encourage repeat bloom. During the first growing season, remove the faded flowers above the uppermost 3-leaflet leaf. Removing a larger amount of foliage reduces the young plant's ability to manufacture food and may slow its growth. When

deadheading established roses, the stem may be cut back to a 5-leaflet leaf. Retain at least two 5-leaflet leaves on each shoot. Using hand shears, cut about 1/4 inch above the leaf with the cut made parallel to the angle of the leaf. Stop deadheading hybrid teas, grandifloras, and floribundas in late summer (late August or September). The development of rose hips (fruits) slows plant growth and helps prepare the plants for winter.

There is usually no need to deadhead old-fashioned, shrub roses as many are one-time bloomers. Plus, the hips of some are quite attractive.

## The Magnificent Monarch Journey

By Kelsey Carlson  
Entomology Intern  
Reiman Gardens



Wouldn't it be great to be able to fly down South every single winter and enjoy the beautiful warm weather of Mexico and California, all expenses paid? Well, I would definitely think so, and the Monarch butterfly is lucky enough to be able to do this exact thing every year. This simple orange and black butterfly you've seen in your garden from time to time and have maybe kept as a pet in a classroom or home makes an extraordinary journey south every year to be able to thrive and survive in the warmer southern climate during our dreary Iowa winters.

This voyage can last up to 3,000 miles for the Monarch butterflies to reach their Southern destination, and no, they don't get the privilege of using cars, trucks, or planes that we would have. The changes in weather such as cooler temperatures and shorter day length trigger the migration for the butterflies. Astonishingly enough, the butterflies that actually participate in migrating southward have never even made the trip before! They are about two or three generations apart from the last Monarch to make the voyage. Researchers

suggest that this trip is made possible every year with the use of a circadian clock located in the antennae of the Monarchs. Another surprising little tidbit of information is that the Monarch butterflies are known to travel to the exact same trees as their ancestors did in previous flights.

The average life span of a Monarch or any adult butterfly typically is not very long, usually about two or three weeks. Now I know that leaves a lot of questioning about how these butterflies can make this extreme trip every year without casualties. The butterflies that make the migration South each year are actually of a later generation as I mentioned above, so they are the exact same as the butterflies that would emerge from their chrysalis in the summertime, except they emerge during the late summer and early fall and reproduce much later during their life. This later generation butterflies gets the "cue" from the changes in weather and scarce food left in their habitat and embark on their trip, but they do not reproduce before this journey. The butterflies that make the Southern expedition can live around 6 to 8 months! After their trip is complete and the winter months are over, the butterflies then reproduce and start their flight north again. While the butterflies that originally made the trip South dies off, they lay their eggs on host plants before they die and later generations finish the trip back up North.

Some, even I, have been known to underestimate the true potential and toughness of the Monarch butterfly. But, the journey they embark on each year is absolutely astounding. They dodge natural predators such as birds, diminishing host plants, and potentially dangerous weather. Next time you see one of these black and orange creatures flying around your garden or even here at Reiman Gardens, think about the true potential of this tiny creature.

For more information and to track the Monarch migration, visit <http://www.monarchwatch.org/>

## Weed Control

By Richard Jauron, Willy Klein  
Horticulture Department  
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Weeds are a constant problem for home gardeners. Weeds compete with garden crops for nutrients, moisture and sunlight. In large numbers, weeds can reduce the quality and yield of fruits and vegetables. Horticulturists with Iowa State University Extension and Outreach answer questions about weeds in general and a couple of specific weed issues. Horticulturists are available through the ISU



Hortline to answer additional questions. Contact them at [hortline@iastate.edu](mailto:hortline@iastate.edu) or 515-294-3108.

### How do I control weeds in my garden?

Cultivation, hand pulling and mulches are the primary means to control weeds in the home garden.

Cultivation and hand pulling effectively control most annual weeds. Perennial weeds are often more difficult to control. Repeated cultivation or the use of herbicides may be necessary to destroy some perennial weeds. When cultivating the garden, avoid deep tillage. The roots of many vegetables, fruits and flowers grow near the soil surface. Deep cultivation will cut off some of these roots. Also, deep cultivation will bring deeply buried weed seeds to the soil surface where they can germinate. Hoe or till around plants or between rows and pull weeds close to plants. To effectively control weeds, cultivation and hand pulling must be done periodically through the growing season. Small weeds are much easier to control than large weeds. It's also important to destroy weeds before they have a chance to go to seed.

Mulches control weeds by preventing the germination of weed seeds. Established weeds should be destroyed prior to the application of the mulch. In addition to weed control, mulches help conserve soil moisture, reduce soil erosion, prevent crusting of the soil surface, keep fruits and vegetables clean, and may reduce disease problems.

Grass clippings, shredded leaves and weed-free straw are excellent mulches for vegetable gardens and annual flower beds. Apply several inches of these materials in early June after the soil has warmed sufficiently. Plant growth may be slowed if these materials are applied when soil temperatures are still cool in early spring. Grass clippings, shredded leaves, and similar materials break down relatively quickly and can be tilled into the soil in the fall.

Wood chips and shredded bark are excellent mulches for perennial beds and areas around trees and shrubs. Apply 2 to 4 inches of material around landscape plantings. These materials decay slowly and should last several years. However, it will be necessary to apply additional material periodically to retain the desired depth.

In some situations, herbicides may be necessary to control difficult to control perennial weeds.

### How can I control weeds in my raspberries?

Cultivation and mulches are the most practical weed control measures for home gardeners. Cultivate the raspberry plantings frequently during spring and summer. To prevent injury to the roots of the raspberry plants, don't cultivate deeper than 2 to 3 inches.

Mulches help to control weeds and conserve soil moisture. Possible mulching materials include straw,

shredded leaves, lawn clippings, crushed corncobs, sawdust and wood chips. The depth of the mulch needed depends upon the material. The depth ranges from 3 to 4 inches for fine materials, such as sawdust, to 8 to 10 inches for straw. Since mulches gradually decompose, apply additional material each year. Avoid mulching poorly drained soils to discourage root diseases.

**How do I control quackgrass in my iris bed?**

Quackgrass is a cool-season perennial grass. It spreads rapidly by underground stems or rhizomes. Quackgrass is extremely difficult to control. To effectively control quackgrass, all of the rhizomes in the soil must be completely destroyed. Any rhizomes (or parts of rhizomes) that remain in the soil will eventually root and produce leafy growth.

My suggestion is to carefully dig up the irises in early summer, place the plants in flats or boxes, and set the irises in a shady location. Then slowly and methodically dig up the area and remove as many of the quackgrass rhizomes as possible. Periodically check the area over the next several weeks and promptly dig up and destroy any quackgrass sprouts that appear. In late summer, replant the irises back in their original location.

**Zinnias**

By Cindy Hayes  
Department of Horticulture  
Iowa State University



Zinnias are special garden plants for several reasons. Who doesn't like zinnias? Who doesn't remember them growing in your grandmother's summer garden? Who hasn't collected a few flowers to put in a vase on the windowsill? And besides, how many other plants can you think of that have a name that begins with a 'z'? Combine the above remembrances and uses with a dizzying array of flower colors, various heights to suit any purpose, and an almost indestructibility in the garden, and zinnias are worthy of a one-of-a-kind reputation.

There are several species that contribute to this outstanding reputation. By far the most widely known species is *Zinnia elegans*. This native of Mexico is the one your grandmother grew. It has the widest range of flower size (1/2inch to 2 inch diameter), flower colors (every color except true blue, brown, or black), flower forms (single, double, cactus, etc.), and heights (8 inches to 4 feet tall). But alas, such variety comes with a price. *Z. elegans* requires regular deadheading and consistent moisture to keep it blooming all summer. If it is not planted in a sunny location with good air circulation, it is often infested with powdery mildew or another disease. Finally, even though it is native to

Mexico, *Z. elegans* is not the most heat tolerant of the zinnia species available.

Another recognizable species is *Z. angustifolia*. This smaller zinnia is native to the Southeastern United States and Mexico and is known for its durability in the garden. Unlike *Z. elegans*, *Z. angustifolia* requires little deadheading and is highly resistant to powdery mildew and other diseases. It's legendary heat tolerance more than makes up for the limited palette of flower colors and plant heights. In fact, a couple of cultivars were awarded the distinction of All-American Selection Winners.

Name Flower	Colors	Flower Size (inches)	Plant Height (inches)
Profusion Series	Orange, White, Cherry	2	12-15
Crystal	White	2	12
Star Series	Orange, Gold, White	1-2	12

A lesser-known zinnia species, *Z. haageana*, is gaining in popularity. It is smaller like *Z. angustifolia* and is equal in its resistance to disease. However, some deadheading is required to keep plants blooming profusely all summer. While there is only one cultivar or series common in the trade, it is more than worthy of consideration in the garden.

All zinnias prefer full sun and well-drained soils. If properly planted and maintained, even the most difficult cultivars will remain attractive. All are wonderful cut flowers and easily brighten any windowsill. Continue the legacy: find a few places in your garden to plant zinnias.

**Glenwood's Giving Garden and Mills County Master Gardeners receive State Search for Excellence Award**

By Nancy Crews  
Mills County Extension and Outreach



Glenwood's Giving Garden (GGG) and a group of Mills County Master Gardeners (MG) have been selected for the 2013 Iowa State Master Gardener "Search for Excellence" Award. Mills County MG's Lisa and Mike Dytrych, Preston Sargent, Denise Fikes, Cathy Evans, Annette O'Brian, Sue Parker, and Paul Speck have been recognized. The GGG would not be possible without the generosity of landowners June Focken and Carol McCormick. The group will be honored on July 12 at **Reiman Gardens** at a dinner featuring outstanding Master Gardeners from around Iowa and the projects that they have worked on. Congratulations!

## Mosquitos Are Out in Force

By Brendan Dunphy  
Entomology Department  
Iowa State University



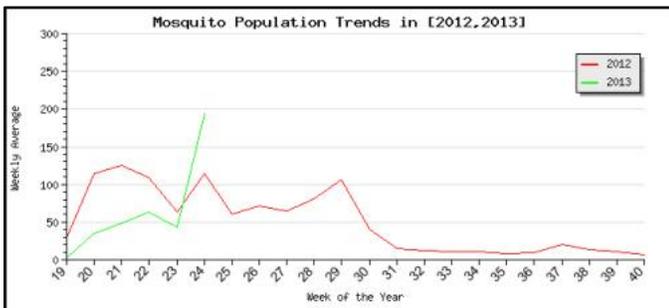
Below is the summary of mosquito activity in Iowa from the ISU Medical Entomology Laboratory. Mosquito surveillance in Iowa has been ongoing since 1969. During the summer months, the Iowa State University Medical Entomology Laboratory, in cooperation with the Iowa Department of Public Health and the University of Iowa Hygienic Lab, monitors mosquito populations and mosquito-borne diseases in Iowa.

Mosquitoes are not out at extreme levels, yet. But they are thick. Mosquito survey personnel in central Iowa report that it has been rare to find a day or night in the past week when mosquitoes did not visit for a blood meal. By far the most common mosquitoes on the wing are Aedes species, known as floodwater mosquitoes. These, unfortunately for us, are the ones that most love to feed on humans

The Iowa mosquito collection data for the year are available online at the Iowa Mosquito Surveillance website. The statewide average mosquito counts by week (including a comparison to last year's mosquito activity) are shown.

Trap data indicate the current trap counts are, on average, greater than for any week of 2012.

Summary for the week of June 17, 2013



Last year's activity was extremely low, so this annual comparison doesn't state much by itself. However, you can be sure that the rainwater and warm temperatures have persisted long enough for the mosquitoes to develop, emerge, and now thrive.

In times like these, it's important to remember that insect repellents with DEET are effective at warding off adult mosquitoes. It's just as important to remember source reduction, which means eliminating sources of standing water, where immature mosquitoes develop. Such

sources include bird baths, wheel barrows, tires, buckets, etc.

The season for West Nile activity has not yet started, but we will inform you of surveillance results as the summer proceeds. <http://mosquito.ent.iastate.edu/>

## Upcoming Horticulture Events of Interest:

### **Glenwood Lake Park Farmers Market**

Wednesdays, June 6 to Sept. 12, 4:00 PM – 7:00 PM

Vendors offering locally-grown garden and orchard produce, baked goods, eggs, crafts, plants, etc.

### **Silver City Farmers Market**

Saturdays throughout the summer beginning on June 2

Time: 8:00 AM – 11:30 AM

Located in the Silver City Park

### **Malvern Farmers Market**

Saturdays throughout the summer beginning June 22nd

Time: 4:00 PM – 6:00 PM

Located at the Park beside the Library in Malvern

### **Garden Walk**

**Date:** Thursday, July 11

**Time:** 6:00 – 7:30 PM

**Location:** 3 locations in Glenwood, IA

Rain or shine and will include 4 homes. Admission is free will donation.

52257 Brookside Ave, Glenwood – Home of Norma and Gretchen Reimersma – Sawtooth Farm  
21900 Brookside Circle, Glenwood – Home of Bruce and Janet Obrecht - Artscape Landscaping  
52501 Brookside Ave, Glenwood – Home of Chris and Michelle Morris  
52410 Brookside Ave, Home of Dennis and Debbie Anderson

### **Mills County Fair**

**Date:** Saturday, July 20

Open Class Floriculture & Agriculture

Entries received at the Mills County Fairgrounds

8:00 AM – 12:00 Noon



**Enter your Flowers and Vegetables!**

Open Class fair books are available at area banks, libraries, and the Extension Office in Malvern. Books are also online: [www.extension.iastate.edu/mills](http://www.extension.iastate.edu/mills) (homepage under Mills County Fair)

### **Master Gardener Webinars**

Date: Tuesday, July 23 and August 13  
Time: 6:30 – 8:30 PM  
Location: Mills County Extension office, Malvern

July 23 - Richard Jauron - "Landscape Plants for Moisture Extremes"; Denny Schrock - "Waterwise Landscaping"  
August 13 - Jeff Iles - "Diagnosing Drought Damage, Flood Damage, and Other Abiotic Stress Injury on Landscape Trees & Shrubs"  
September

### **Fruit and Vegetable Field Day**

Date: Monday, Aug 12  
Time: Registration 1:30 PM  
Location: ISU Horticulture Research Station  
Ames, IA (3 miles north of Ames on Hwy. 69)  
Cost: \$25 per person (supper included)

Registration form: <http://www.aep.iastate.edu/hort/>

See article below for more information

### **Fruit and Vegetable Field Day**

By Ajay Nair, Willy Klein

Horticulture Department  
Iowa State University



The 2013 Fruit and Vegetable Field Day at the Iowa State Horticulture Farm in Ames is set for Monday, Aug. 12. The field day will begin at 2 p.m. and feature research-based information on a variety of production topics of interest to fruit and vegetable growers.

Although geared towards commercial production the event would be helpful to small scale growers, master gardeners and home owners who are interested in enhancing their production skills and diversifying their gardens and acreages.

The program fee for the event is \$25 which includes evening supper and refreshments. Participants are encouraged to stay after the meal to mingle with growers, researchers, agriculture professionals and extension personnel. Registrations for the field day can be made at <http://www.aep.iastate.edu/hort/> Online

registration closes on Aug. 5 at midnight. A limited number of on-site registrations at \$35 will be available.

Tentative agenda includes a welcome by Jeff Iles, chair of the Department of Horticulture at Iowa State University and presentations on topics related to fruit and vegetable production. The field day will tour research plots on biochar in carrot and pepper production; mechanization and disease management in cucurbit production; sweet potato cultivar trials; role of colored plastics in vegetable production; high tunnel production of tomatoes, cucumbers and raspberries; northern climate grape cultivar trials; apple root stocks and training systems; disease management system evaluation in apples; honey bee health and behavior; and other topics.

The Department of Horticulture in partnership with Practical Farmers of Iowa, Iowa Fruit and Vegetable Growers Association, and the Leopold Center for Sustainable Agriculture are field day organizers. The event would provide opportunity for real time assessment of ongoing research in the area of fruit and vegetable production.

### **Master Gardener Training Offered**

By Nancy Crews  
Mills County Extension and Outreach



Would you like to become an Iowa Master Gardener and volunteer in our community? Whether you are a long time gardener or a novice, you are welcome to join our group! A new series of training classes will be offered by Iowa State University at the Mills County Extension office in Malvern beginning Tuesday, September 24 and running consecutive Tuesdays through November 12. The registration deadline is September 13. The cost for the training is \$195. The Mills County MG's are offering scholarships for participants. For more information and to register for the training contact Nancy Crews at the ISU Extension office at 712-624-8616 or [ncrews@iastate.edu](mailto:ncrews@iastate.edu)

### **Ask the ISU Extension Gardening Expert**

**My vegetable garden was flooded and destroyed. It is too late to replant?**

Fortunately, there is still time to plant several vegetable crops. In central Iowa, the last practical date to plant early maturing sweet corn varieties is July 1. Cucumbers and summer squash can be planted until July 20. August

1 is the last practical date to plant snap beans, carrots and beets. (The last practical planting dates would be approximately 1 week earlier in northern Iowa and 1 week later in southern portions of the state.)

### **My June-bearing strawberry patch was flooded in June. Can I harvest the berries?**

Berry fruits, such as strawberries, are highly susceptible to bacterial contamination. Silt and other contaminants may become imbedded in the fleshy fruit and are difficult to remove. Since the berries were present when the garden was flooded, do not harvest and eat any of the fruit. Renovate the strawberry patch in early July. Next year's crop should be safe to eat.

### **How long do Japanese beetles feed on plants in the yard and garden?**

Japanese beetles are present for about six to eight weeks every summer. Adult beetles usually begin to emerge from the ground in mid-June and new adults continue to appear through July. Each beetle lives from 30 to 45 days.

### **How do I control Japanese Beetles in my Grape Vines?**

In home gardens, small numbers of Japanese beetles can be controlled by handpicking. The best time to physically remove Japanese beetles is early morning when the beetles are sluggish. Collect or shake beetles into a bucket of soapy water and discard.

If handpicking is not feasible, applications of an insecticide, such as carbaryl (Sevin), malathion, or permethrin, can reduce Japanese beetle damage. Repeated applications will likely be necessary because of the short residual effect of the insecticides.

## **JULY GARDENING TO DO LIST**



- Remove suckers at the base of crabapple trees.
- Certain pesticides have a waiting period of several days between the time of last spray and harvest. Read and follow directions on all pesticide labels before applying them to vegetable crops. Wash all produce thoroughly before use.
- Moistened and turn your compost pile on a regular basis.

- Continue deadheading plants to prolong bloom, prevent unwanted seedlings, and improve the overall appearance.
- Water tomatoes consistently to avoid problems with splitting and blossom-end rot.
- Divide and replant bearded irises every 3 to 5 years. Dig the clumps carefully. Discard any diseased or damaged rhizomes and the old center portion. Cut back the leaves to 6 inches. Then replant.
- Remove canes of summer-bearing red raspberries after last harvest.
- Remove cool-season vegetables, before they start to bolt, or form seed stalks, during hot, dry weather.
- Continue to harvest beans and squash to keep plants productive.
- Mulch peppers, tomatoes, cucumbers and squash to conserve moisture and keep weeds down.
- Prune tomatoes by pinching out axial suckers.

### **Resources for Horticulture information**

ISU's Hortline at (515) 294-3108  
(Monday-Friday, 10 a.m.-noon, 1-4:30 p.m)

ISU/Mills County Extension: 712-624-8616  
[www.extension.iastate.edu/mills/yardgarden.htm](http://www.extension.iastate.edu/mills/yardgarden.htm)

### **Iowa State University Publications**

NCR 0025 Lawn Weeds and Their Control (\$7.25)  
PM 773 Weed Control – Poison Ivy  
RG 209 Organic Mulches  
RG 601 Gardening for Butterflies  
PM 0819 Planting a Home Vegetable Garden  
PM 534 Planting & Harvesting Times for Garden Vegetables (Free)

**Horticulture Publications on-line**  
<https://www.extension.iastate.edu/store/ListCategories>

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