Now taking applications for Jefferson County Master Gardeners

Become a Master Gardener, attend the training program, provide 40 hours of volunteer service, and help others who share a love of gardening.

Starting in September • Space is limited

Contact the Jefferson County Extension office to apply
barbgri@iastate.edu, 641-472-4166

www.mastergardener.iastate.edu

Tuesdays beginning September 29th thru November 17th
Volunteering and Gardening Come Together on the Master Gardener Journey

Core training course offered from Sept. 29 to Nov. 17 at county extension offices

ARTICLE | WED. 06/10/2015 - 09:12 | BY SUSAN DEBLIECK

AMES, Iowa – Become an Iowa Master Gardener by completing the core training course this fall at a local Iowa State University Extension and Outreach office. Gardeners will learn best practices for choosing plants, designing gardens and managing pests. Classes start in September.

Those interested in applying for the course can contact their local ISU Extension and Outreach county office. Application deadline is Aug. 1, 2015, as space is limited. Accepted participants will be notified by Sept. 11, 2015. The three-month course fee is $195 and may vary by county.

"Starting this September, people can begin their journey to become a Master Gardener volunteer," said Susan DeBlieck, program specialist with ISU Extension and Outreach. "The training course includes lectures on gardening subjects, from growing vegetables and fruits to designing gardens with sustainable turfgrass."

After completing the course, Master Gardener trainees start their work as volunteers within the community. Upon completion of the 40 hours of volunteer service, the master gardener title becomes official and they join thousands of other Iowa volunteers.

"Master Gardeners provide information and education to Iowans. They are a community resource growing vegetables for food pantries, teaching fair-goers about pollinators and bringing native plants back to Iowa landscapes," said DeBlieck. In 2014, over 105,000 volunteer hours in Iowa were logged by Iowa Master Gardeners.

DeBlieck notes a second enrollment option is available for those not interested in volunteering. Registering as a professional horticulture trainee ($550 fee), offers the same educational course and materials, but participants earn a certificate upon completion without having to provide the 40 hours of community service.

The Master Gardener Core Training Course is provided by local ISU Extension and Outreach offices on Tuesdays evenings from 6:30 to 9:30 p.m., Sept. 29 through Nov. 17 (dates may vary by county), and one Saturday daytime class on Oct. 10 or 24 at Iowa State University in Ames.

The core training course will be hosted in ISU Extension and Outreach offices in over 30 locations throughout the state: Altoona, Ames, Bettendorf, Bloomfield, Carroll, Cedar Rapids, Cherokee, Council Bluffs, Creston, DeWitt, Dubuque, Fairfield, Garner, Grundy Center, Ida Grove, Indianola, Independence, Iowa City, Knoxville, Logan, Maquoketa, Marshalltown, Mason City, Monticello, Mount Pleasant, Muscatine, Osceola, Oskaloosa, Pocahontas, Rock Rapids, Sac City, Sioux City, Tipton, Trinity, Wapello, Washington, Waterloo, Waukon and West Burlington.
Rain Gardens: Filtering and Recycling Rain Water

One of the effects of urban area growth is an increase in the amount of land devoted to new homes, offices, shopping centers, and parking lots. Besides covering and compacting the soil, these new developments create impermeable surfaces. Open areas that once allowed rain to soak into the ground now send that water elsewhere. Storm water run off from parking lots and buildings carries along soil and chemical residues that end up in the ground water system we depend on.

Installing a rain garden is one way to help manage that run off. Channeling the water into a specifically prepared site allows more of the impurities to be filtered out of the water before they enter the ground water supply.

What is a rain garden?
A rain garden is a specially designed and slightly depressed site where rain water can be collected and allowed to slowly percolate through the soil. Filtering the rain water through the soil and plant roots removes many of the lawn and roof chemical residues and soil particles.

Although developed in the 1990s, rain gardens have been slow to catch on until recently. Many municipalities, corporations, and individual homeowners are installing rain gardens to help hold more rain near where it falls as a way to improve the storm water drainage.

How do I decide where to put a rain garden?
Like other landscaping features, a rain garden needs to fit into the overall plan. It should have a pleasing shape that complements the existing landscape. It also should be at least 10 feet away from houses to prevent water from seeping into basements.

Rain gardens are best sited where they can act as filters, not as ponds. Although it sounds easiest to take advantage of natural or existing drainage patterns, rain gardens should not be placed where water already pools. Standing water indicates that the soil in that site has a high clay content or is heavily compacted. Soils with a higher sand content will drain more quickly.

Professional help may be necessary to determine the final location so that water is subtly directed to the rain garden rather than to the current pooling site. An alternative solution is to excavate the low spot and replace the soil with a mixture of sand, top soil, and compost.

Aerial view of home site

< 12% slope

berm

street

> 30' from down spout

> 30' from down spout

not within 10' of foundation

street

close to down spout

close to down spout

> 10' from foundation

IOWA STATE UNIVERSITY
Extension and Outreach

RG 605  Revised  March 2013
What should I know about building and maintaining a rain garden?

An important first step is locating the utility lines. Some designers request you do this before they visit the site. If not done then, it must be done before beginning to dig. Contact Iowa One Call (1-800-292-8989) to request this free service.

Excavating the entire rain garden area is recommended even if drainage is not a problem. The finished grade should be 4 to 6 inches below the surrounding area. The depression collects and holds the rain water while it percolates through the soil. To improve drainage of clay soil, work in equal amounts of sand, top soil, and compost.

To prevent heavy rains from washing out the opposite side of the garden, construct a small berm along the backside. The soil that was excavated can be used to build the berm.

Spring planting is ideal for growing plants a good start. However, potted plants can be added through the summer as long as they are watered as necessary until well established.

After planting, water the area well and add a one- to two-inch layer of mulch over the garden area. Mulching helps control weed growth while the plants are small.

Adding a few well-placed rocks along the side where water enters the garden will help reduce the possibility of heavy rain washing away the mulch.

During the first few years, the garden will need weeding and minimal care until the plants are established. Watering should only be done when there has been no rain for an extended period of time.

- Sweet flag (Acorus calamus)
- Swamp milkweed (Asclepias incarnata)
- New England aster (Aster novae-angliae)
- White false indigo (Baptisia lactea)
- False aster (Boltonia asteroides)
- Marsh marigold (Caltha palustris)
- Bottlebrush sedge (Carex comosa)
- Tussock sedge (Carex stricta)
- Turtlehead (Chelone glabra)
- Queen of the prairie (Filipendula rubra)
- Blue flag iris (Iris versicolor)
- Prairie blazing star (Liatris pycnostachya)
- Cardinal flower (Lobelia cardinalis)
- Virginia bluebells (Mertensia virginica)
- Smooth penstemon (Penstemon digitalis)
- Meadow rue (Thalictrum)
- Ironweed (Vernonia fasciculata)

For a more complete listing of plants suited to Iowa rain gardens visit these websites:

**The Groundwater Foundation (Rain Gardens 101)**
www.groundwater.org/ta/raingardens.html

**University of Minnesota Extension**
www.extension.umn.edu/distribution/horticulture/DG8464.html (Click on “Rain Garden Plants”)

Where can I find more information?
These websites offer additional information:

**Urban Resources & Borderland Alliance Network (URBAN)**
www.urbanwaterquality.org

**Rain Gardens of West Michigan**
www.raingardens.org

Rain Gardens: A household way to improve water quality in your community and Rain Gardens: A how-to manual for homeowners, University of Wisconsin Extension
http://clean-water.uwex.edu/pubs/

Contact your Iowa State University Extension county office. Visit one of these websites.

**http://store.extension.iastate.edu/**
www.yardandgarden.extension.iastate.edu
www.reimangardens.iastate.edu

Call ISU's Hortline at (515) 294-3108 (Monday-Friday, 10 a.m.-noon and 1:40 p.m.)

Prepared by Tigon Wol-line, horticulture graduate student, and Ann Marie VanDerZanden, extension horticulturist.

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...and justice for all

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Euonymus caterpillar

K.A. Delahaut

In July 1989 a new insect pest appeared in Wisconsin—the euonymus caterpillar (*Yponomeuta cagnagella*). The caterpillar was identified in locations throughout the southern half of the state on the spindletree euonymus and the winged euonymus (also known as the burning bush euonymus). In subsequent summers, the euonymus caterpillar has reappeared, and its numbers and distribution seem to be increasing. In 1994, it was found damaging the eastern wahoo euonymus (*Euonymus atrapurpureus*), winter creeper euonymus, and common buckthorn.

**Symptoms and effects**

The euonymus caterpillar, a member of the ermine moth family (family *Yponomautidae*), has long been a pest of the spindle tree euonymus in Europe, the Middle East, and parts of Asia. Since 1967, this caterpillar has also been noted in the eastern United States and Canada. The larvae of the caterpillar feed in colonies upon the foliage of preferred shrubs, within loose webs they have woven (figure 1). The larvae usually begin feeding on the ends of branches and work their way toward the center of the plant.

If not controlled early in their development, these caterpillars can defoliate entire plants over a brief time and envelop the plant in webbing. In severe attacks, the extensive webbing remains on the plant for a long period, leaving the plant quite unsightly. The damage caused by the euonymus caterpillar does not typically kill its host, but repeated defoliation may weaken the plant and predispose it to attack by other insects or pathogens.

**Life cycle**

The euonymus caterpillar is colored creamy white with rows of black spots on each thoracic and abdominal segment. This contrasting coloration makes the caterpillar very distinctive and easy to identify (figure 2). The larvae reach ¾ inch long at maturity. The adult moth is also white and retains the distinctive spots; however, they are arranged in three longitudinal rows along the moth’s forewings. The wingspan of the adult moth is approximately 1 inch.

*Figure 1. Euonymus caterpillars spin webs around the branches of susceptible species, starting at the tips.*

*Figure 2. The larva of the euonymus caterpillar is distinctively colored—creamy white with rows of black spots.*
Adult moths appear in mid- to late July, at which time they mate and lay eggs. After mating, the adult female lays her eggs on twigs, branches, and in the bud axils of susceptible plants. The eggs are covered with a gummy substance that hardens and becomes virtually invisible. The eggs hatch in mid-August and the first-instar larvae (caterpillars) feed briefly before preparing to overwinter beneath the egg shells.

The following spring, the larvae produce webs and begin to feed on the new, growing foliage. Larvae typically feed in groups. As the larvae grow, so does the size of their webs. Often, the webs become so large that they envelop entire branches. In late June, cocoons form and the caterpillars pupate until late July, at which time adult moths emerge to repeat the cycle. There is only one generation per year.

Do not confuse the euonymus caterpillar with the eastern tent caterpillar. The eastern tent caterpillar makes more densely woven tents earlier in the year—from early May to early June—and it prefers wild cherry, choke cherry, apple, and ornamental crabapple. For more information on this pest, see Extension publication Eastern Tent Caterpillar (A2933).

**Control**

Scouting for euonymus caterpillars should begin in mid-May to early June. Examine susceptible species for small caterpillars and early signs of webbing. Small infestations may be successfully treated by hand pruning to remove the infested foliage. For larger caterpillar populations, several insecticides, including the bacterial agent *Bacillus thuringiensis* (Bt), are available. Bt *kurstaki* is the most effective variety against the euonymus caterpillar. Commercial growers should consult Extension publication *Woody Ornamentals Pest Management in Wisconsin* (A3597) for other specific insecticide recommendations.

Regardless of the material selected for control, treatments should be made to the early larval instars to ensure success.
Let's Play ... FOOD: Keep or Toss?

Alice Henneman, MS, RD, UNL Extension in Lancaster County
Joyce Jensen, REHS, CP-FS, Lincoln-Lancaster County Health Department

Should you “Keep” or “Toss” the following foods? Circle the correct answer.

1. Tacos left on the kitchen counter overnight? KEEP  TOSS
2. Meat thawed all day on the kitchen counter? KEEP  TOSS
3. Cut or peeled fruits and vegetables left at room temperature MORE than 2 hours? KEEP  TOSS
4. Leftover pizza placed in the refrigerator within 2 hours after it was cooked? KEEP  TOSS
5. Leftovers kept in the refrigerator for over a week? KEEP  TOSS

ANSWERS:

1. TOSS. Even if you reheat tacos left out overnight, some bacteria can form a heat-resistant toxin that cooking won’t destroy. Refrigerate perishable foods within 2 hours!

2. TOSS. As with the tacos, bacteria may have formed a heat-resistant toxin when the meat was left on the kitchen counter.

   The best place to thaw frozen perishable foods — like frozen meat, poultry, seafood, vegetables, fruit and cooked pasta and rice — is in the refrigerator!
   Make sure your refrigerator is 40°F or lower.
   Thaw packages of meat, poultry and seafood on a plate on the bottom shelf of the refrigerator. This prevents their juices from dripping on other foods.

   When thawing perishable food in the microwave, cook it immediately after thawing. Some areas of the food may start to cook during microwave thawing and become warm. Any bacteria present would not have been destroyed and may reach optimal temperatures for growth.

Know how. Know now.
3. **TOSS.** When fruit is peeled or cut, bacteria on the outside can be transferred to the inside. Refrigerate cut/peeled fruits, veggies & other perishable foods within 2 hours! Just 1 bacteria in foods can grow to 2,097,152 bacteria in 7 hours!

**Cleaning Fruits and Veggies**
1. Remove and discard outer leaves.
2. Rinse under clean, running water just before preparing or eating. 
   Don't use soap or detergent as it can get into produce and make you sick.
   Rinse fruits with peels — even when the peel is removed — such as melons and citrus fruits!
3. Rub briskly — scrubbing with a clean brush or hands — to clean the surface.
4. Dry with a clean cloth or paper towel. Moisture left on fruits and vegetables helps bacteria grow. Dry them if you won't eat or cook them right away.
5. Cut away bruised and damaged areas.

4. **KEEP.** If perishable foods have been at room temperature less than 2 hours (1 hour in temperatures above 90°F), they should be safe. Refrigerate promptly; eat within 3 to 4 days.

5. **TOSS.** Even refrigerated leftovers may become unsafe within 3 to 4 days. You can't always see or smell or taste if a food is unsafe. You could get sick tasting a food!

**Remember: When in doubt ... TOSS IT OUT!!!**

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**Resources:**


Source of Images: Microsoft Image and Media Library

Contact for Publication: Alice Henneman at ahenneman1@unl.edu

Updated 6/2010 • This publication has been peer reviewed.
Jump into Financial Literacy at Iowa Conference July 16

AMES, Iowa – Iowa teachers and other educators are invited to “Take a Jump into Financial Literacy” July 16 at the 15th Annual Conference for Personal Financial Literacy sponsored by Iowa Jump$tart. The free conference runs from 8 a.m. to 4 p.m. at the FFA Enrichment Center at DMACC in Ankeny.

“The conference focuses on key financial literacy concepts. You'll gain a wealth of resources and information to help you teach financial literacy to your students,” said Margaret VanGinkel, a human sciences specialist in family finance with Iowa State University Extension and Outreach.

Jump$tart is a coalition of a variety of organizations that have a passion for improving the financial literacy skills of Iowa youth and adults, VanGinkel said. The Iowa conference features break-out sessions, exhibitors and special speakers, including keynote Mike Finley, known as the Crazy Man in the Pink Wig. Finley has a personal campaign to improve financial literacy with Iowa students.

VanGinkel said ISU Extension and Outreach will have an exhibit about the High School Financial Planning Program and its free curriculum for teachers.

The Iowa Jump$tart coalition has sponsored the conference for the past 15 years and includes ISU Extension and Outreach, banks and credit unions, AARP, Iowa Student Loan and other organizations. Register online. The deadline is July 8.

Each year Iowa Jump$tart sponsors the registration for one teacher to attend the National Jump$tart Conference in the fall in Washington, D.C. Participants must attend the Iowa Conference to be eligible, Van Ginkel said.

For more information about the Iowa conference, see http://iowajumpstart.org/whatwedo/personal-financial-literacy-conference/.
Farm Land Leasing Meetings

5 locations from which to choose in SE Iowa

August 5th—9:00 AM—Mahaska Co
6:00 PM—Louisa Co

August 6th—9:00 AM—Lee Co
6:30 PM—Henry Co

August 7th: 9:00 AM—Jefferson Co

Whether you’re a landlord or tenant, grain farmer or livestock farmer, you’ll be interested to know what is a fair rent.

Each meeting will last 2 1/2 to 3 hrs. Each participant or couple will receive a 100 page Farm Land Leasing book. Cost for participants is $25 each or $35/couple who preregister, or $5 extra at the door.

Topics include:

- Current land value & cash rental rate surveys
- Types of farm lease arrangements
- Determining a fair cash rent
- Strategies for writing and terminating a farm lease
- ISU Extension web-based and other resources

Call Jefferson County Extension at 641-472-4166 to preregister.
Yard and Garden: Successfully Growing Azaleas and Rhododendrons

AMES, Iowa – Azaleas and rhododendrons are spectacular flowering shrubs that can brighten any yard or garden. Even though there are many species of azaleas and rhododendrons, only a small number can successfully be grown in Iowa. Here are some tips from horticulturists with Iowa State University Extension and Outreach showing what steps to take to ensure successfully grown azaleas and rhododendrons. To have additional questions answered, contact the ISU Hortline at hortline@iastate.edu or call 515-294-3108.

Can azaleas and rhododendrons be successfully grown in Iowa?
There are more than 900 species and innumerable cultivars of azaleas and rhododendrons, but only a small number that can perform well in Iowa. To be successful, the Iowa gardener must select cold hardy cultivars, choose suitable planting sites and follow recommended planting procedures. Azaleas and rhododendrons are members of the genus Rhododendron. Deciduous members of the genus are commonly called "azaleas" while the evergreen species are referred to as "rhododendrons."

What are suitable planting sites for azaleas and rhododendrons?
Proper site selection is important when planting azaleas and rhododendrons. Azaleas prefer partial to full sun, while rhododendrons perform best in partially shaded sites. Areas that receive morning sun and afternoon shade are usually good sites for rhododendrons. It is best to avoid windy, exposed sites. During the winter months, strong winds and bright sunlight can dry out rhododendron foliage and cause extensive leaf burn. Azaleas and rhododendrons require well-drained, acidic soils. The preferred soil pH for azaleas and rhododendrons is 4.0 to 5.5. However, the pH of most garden soils in Iowa ranges from 6.5 to 7.5. The soil pH needs to be lowered to successfully grow azaleas and rhododendrons. Planting azaleas and rhododendrons in wet, poorly drained soil usually results in their death. Gardeners with poorly drained sites should build beams or raised beds to insure good drainage.

How do I lower the soil pH for azaleas and rhododendrons?
Home gardeners can lower their soil pH by adding sphagnum peat moss to the soil. The pH of sphagnum peat moss generally ranges from 3.0 to 4.5. To do this, dig a wide, shallow hole and backfill it with a mixture that is half soil and half moistened sphagnum peat moss. After planting, mulch azaleas and rhododendrons with wood chips, pine needles or shredded oak leaves. These materials are mildly acidic and help maintain the desired soil pH. Additionally, sprinkle a small amount of sulfur around plants on an annual basis.

Which azaleas can be successfully grown in Iowa?

Which rhododendrons can be successfully grown in Iowa?
The most widely grown rhododendrons in Iowa are the Weston hybrids. Introduced by the Weston Nursery in Massachusetts, these cultivars possess excellent cold hardness. Weston hybrids include: ‘PJM’, lavender pink flowers, ‘PJM Compact’, compact plant, lavender pink flowers, ‘PJM Elite’, blossoms are slightly more pink, ‘Algo’, light pink flowers with dark pink throats, and ‘Olga Mezzit’, bright pink flowers. The Marjatta hybrid rhododendrons are another group of hardy rhododendrons. Introduced by the University of Helsinki in Finland, cultivars include: ‘Elvirra’, bright red flowers, ‘Haaga’, rosy pink flowers, ‘Heliikki’, violet red flowers, ‘Helsinki University’, shell pink flowers,
Notice:

Due to lack of funding, the NEST Parenting Program has been cancelled.

Your past support and patronage is deeply appreciated.