



IOWA STATE UNIVERSITY University Extension

Helping you become your best.

Dubuque County Extension
14858 West Ridge Lane, Suite 2
Dubuque, IA 52003-8466
563-583-6496; Fax 563-583-4844
www.extension.iastate.edu/dubuque



Hello everyone!!!

It is very hard for me to believe that this is the **FINAL** newsletter of 2011. Where has this year gone?

We all had a wonderful time at the Recognition Dinner. It was great to see all the gardeners and our wonderful Tour of Gardens hosts in attendance. Thanks to all of you that make our organization so successful.

Hope you all had a wonderful Thanksgiving. I am a little late getting this newsletter out. I have had computer problems and just had my computer come back to me yesterday. We don't know how much we depend on these things until they aren't working. I have my son to thank for getting this fixed for me.

Merry Christmas and Happy Healthy New Year to all.

-- Mary Ann Emery

Mission Statement

The mission of the Master Gardener Program is to provide current, research-based, home horticulture information and education to the citizens of Iowa through ISU Extension programs and projects. Through their participation in educational activities, Master Gardeners also increase their own personal knowledge in horticulture. Master Gardeners extend Iowa State University Extension's consumer horticulture education programs through volunteer activity.



Items of Interest!

- 1) Message from Marv
- 2) Reporting Hours On-Line
- 3) Salad Recipe
- 4) Directory of Articles
- 5) Does Anyone Need Shredded Paper?
- 6) Ask The Experts
- 7) Amaryllis and Paperwhite Narcissus
- 8) Weed Identification Guide
- 9) Houseplant Care in Winter
- 10) Winter Protection for Strawberries
- 11) Bed Bug Resources
- 12) Larger Yellow Ants
- 13) Gardening Tip



Master Gardener News Items

Please mark your calendars with these important dates. Thanks Everyone!

- a) **Master Gardener Advisory Committee Meeting; 2nd Monday of each month, 6:00 pm at the Extension Office. These meetings are open to all Master Gardener's, Trainees (interns) and invited guests. Please come and support your Extension programs. M.G. Advisory Committee Meeting: Monday, January 9, 2012 at 6:00 pm at the Dubuque County Extension Office.**
NOTE: These events have been approved for volunteer hours toward gaining or maintaining your Master Gardener certification. Please contact Marv Stoffel at (563)582-4764 or by email at stoffel19@mchsi.com if you

want to be a volunteer at any of these events. Watch this area for more exciting events to come.

From Marv Stoffel, President Master Gardener Advisory Committee

I'll have to say it again! What a wonderful fall we have been having. The weather has been unbelievable so far. We are on track to have one of those rare Thanksgivings with fairly warm temperatures.

Our 2011 Recognition Awards Banquet on November 7th was a huge success. We had a good turnout including the garden tour hosts. It's always such a pleasure to recognize all the great volunteers that we have to make our Master Gardening organization the great success that it is. Thanks to LeAnn Keller and Mary Lou Baal for chairing this event. The results are in for the elections of officers: Marv Stoffel for President, Mary Ann Emery for Vice President, and Cathy Darrah for Secretary. I know that I can speak for Mary Ann and Cathy in saying it's a privilege and an honor to serve you as your Officers.

We are planning on having a new class of Master Gardening Interns. The classes will be starting in January. The invitation letters and information have been sent out to prospective new Interns. It's always exciting to see and meet these new Interns. I'm really looking forward to this. This is just a reminder to some of you. Please, don't forget to turn in your education and volunteer hours by the end of this year so that we can go over and record these hours. You will need to do this to be recertified as a Master Gardener.

I know with the Holiday Season coming up, everyone is very busy. So with that in mind, I'm wishing everyone a Happy Thanksgiving and a very Happy Holiday Season!

Reporting Hours On-Line

*Submitted by Cathy Darrah,
Secretary of Dubuque Master Gardeners*

Iowa State is now requiring education and volunteer hours to be reported on-line. **The deadline for entering this information is November 1.** Please get your hours in so that you can get recognition for the work that you have done. For those who would like to register and do this on their own, the following will help you get started. For those who cannot report hours on-line, continue sending in your hours to the Extension office as you have previously done and the hours will be put into the computer for you.

To begin reporting your hours on-line you first must register:

Registration is found at:

www.mastergardener.iastate.edu

In the center of the Master Gardener home page is a link titled Report Your Hours Online. Click on this link.

A new page will open with an ENROLL link in the center of the page, click on that link.

You will be asked to type in your email address and then to retype it.

You will need to type in a password and then retype the password again.

Fill out your name, address, city, county, zip, phone and year that you became a Master Gardener.

After you have completed the fields, click enroll.

A detailed How-to presentation on enrollment and to input hours is provided by ISU on the home page: www.mastergardener.iastate.edu directly under the link Report Your Hours Online.

Cathy Darrah will be happy to assist any one in registering and general questions on how to use the on-line reporting. Best time to reach Cathy is in the evening at [563-588-0743](tel:563-588-0743) or email her at jdarrah7@mchsi.com.

Salad Recipe

Several people at the Recognition Dinner asked about a recipe for the salad that Jeanne Ambrosy provided so we thought that we would ask Jeanne for the recipe and include it in the newsletter. If anyone has recipes that you would like to see listed please email them to me at gordycat24@aol.com. This is our newsletter so we are trying to do what we can to make this ours. Here is the recipe:

NAPA CABBAGE SALAD

1 bunch Napa cabbage, finely chopped
2-1/2 oz. slivered almonds
1/2 cup sunflower seeds
2 bunches green onions, chopped
2 pkgs. Chicken Ramen noodles, not seasoning pkt.
1/2 cup butter

Mix together all above ingredients except noodles and butter. Break noodles into small pieces and brown in butter.

Dressing:

1/4 cup oil
1 cup sugar
1 tsp. soy sauce
Scant 1/2 cup white vinegar

Combine in shaker and toss 1/2 hour before serving.

You will receive lots of compliments on this salad. Enjoy and Happy Thanksgiving!

Jeanne Ambrosy

Directory of Ask the Gardening Experts Articles for 2011

I was asked if it would be possible to include a directory of the articles for 2011 that are included in the Ask the Gardening Experts columns. I did that list and it is included with the newsletter. Please let me know by either calling me, Mary Ann Emery at 815-747-6912 or emailing me at gordycat24@aol.com how you feel about this list being included. If I get enough response then I will continue to include this in the coming years. **Thanks in advance for your response.**

Does anyone have a need for shredded paper?

I received this message from Trish and thought I should pass it on to our Master Gardeners. If you have a need for this please call Trish at 563-583-6496. We have a garbage bag of shredded paper here in the office. Is anyone interested in it for mulch, etc? One of our Council members

took it in the past but no longer needs it. We don't get a lot, just a bag or two every now and then that someone could sure have if they have a use for it.

Ask the ISU Extension Gardening Experts



Buying local often times means buying locally grown food, but in December, it can also mean buying a Christmas tree from a local grower. Christmas trees are grown in Iowa and all 50 states, including Alaska and Hawaii. More than 35 million Christmas trees are harvested each year in the U.S. Iowa State University Extension horticulturists provide tips on fresh Christmas trees. To have additional questions answered, contact ISU Extension Hortline at 515-294-3108 or hortline@iastate.edu.

How can I determine the freshness of a cut Christmas tree?



The freshness of cut Christmas trees can be determined with a few simple tests. Gently run your hand over a branch. The needles on a fresh tree will be pliable. Those on a dry tree will be brittle. Another test is to lift the tree by the trunk and lightly bounce the butt on the ground. Heavy needle drop indicates a dry tree. A fresh tree will drop only a few needles.

What is the best way to store a cut Christmas tree?

If you don't intend to set up the Christmas tree immediately, place the tree in a cool, sheltered location. An unheated garage or shed is often a suitable storage site.

(The sun and wind will dry out trees stored outdoors.) Put the butt of the tree in a bucket of water. Remove an inch or more from the bottom of the trunk before bringing the tree in the house. A fresh cut facilitates water uptake.

Should I add any material to the water to prolong the freshness of my Christmas tree?

Do not add molasses, sugar, soft drinks, aspirin or commercial products to the water. Additives provide no real benefit. The keys to keeping a Christmas tree fresh are to place the tree away from any heat source (fireplace, heater, radiator, etc.) and keep the tree reservoir full of water. Check the tree reservoir at least once or twice a day. Fresh trees absorb large quantities of water (especially in the first few days). If the water level drops below the bottom of the trunk, water uptake will be drastically reduced or cease when the reservoir is refilled. A fresh, well-cared-for Christmas tree should be able to remain in the home for three to four weeks.

There are some tiny bugs on my Christmas tree. What should I do?

Aphids and spiders are the two most commonly found pests on fresh-cut Christmas trees. In both cases, adults that were on the trees back in late summer or fall laid eggs on the stems or needles. These eggs normally remain dormant through the inhospitable weather of winter, but they hatch when they become sufficiently warmed by heat within the house. An infestation may vary from just a few to several hundred individuals. Newly hatched insects and spiderlings are very small (approximately 1/16 inch).

None of the insects or spiders that emerge after being carried in on a fresh-cut tree will cause any harm or damage to the tree, the house, the furnishings or the occupants. They cannot bite or sting and they will not live long enough to grow or multiply. The tiny insects or spiderlings are simply an annoyance.

An application of an insecticide to fresh-cut Christmas trees is not necessary or recommended. The insects and spiders will quickly die of starvation or desiccation, whichever comes first. If newly hatched insects or spiders are found on the floor or other areas around the tree, simply vacuum them up and discard them.

What are some good ways to dispose of a Christmas tree after the holidays?

After the holidays, there are several ways to dispose of or recycle your tree (before recycling your Christmas tree, remove all lights, ornaments and tinsel).

Place the tree in the yard or garden for use by birds and other wildlife. The branches provide shelter from strong winds, snow and cold temperatures. Food can be supplied by hanging fruit slices, seed cakes, suet bags or strings of cranberries or raisins on the tree's branches. You can also smear peanut butter and seeds in pine cones and hang them in the tree.

Prune off the tree's branches and place the boughs over perennials as a winter mulch. Chip the tree and use the

chipped material as a mulch around trees, shrubs or in perennial flower beds.

If you can't use the tree yourself, contact local government offices, such as the Public Works Department or your sanitation service. Most communities have some type of Christmas tree disposal program. Some have central collection points; others collect the trees at curbside.

Conservation groups may be another option. Some hunting and fishing groups collect trees and use them to provide habitat for wildlife.

Many gardeners have done their fall cleaning by removing annual garden plants and dead foliage on perennials. However, a gardener's cleaning chores are not over until the tools are cleaned, sharpened and put away for winter so that they are ready the moment spring arrives. Fortunately, this last garden chore isn't weather dependent — it can be done anytime indoors. To have gardening questions answered, contact Iowa State University Extension Hortline at 515-294-3108 or hortline@iastate.edu.

As temperatures move closer to freezing and below, remember the sweet, delicious June strawberries from your garden and take time to protect the plants — and next season's crop. Just like many people, strawberry plants don't like to feel those colder temperatures. Iowa State University Extension horticulturists tell how to protect plants through the winter. Gardeners with additional questions should contact the ISU Extension Hortline at hortline@iastate.edu or call 515-294-3108.

When should I mulch my strawberry bed?

Cold winter temperatures and repeated freezing and thawing of the soil through the winter months are the main threats to strawberry plants. Temperatures below +20 F may kill flower buds and damage the roots and crowns of unmulched plants. Plants also can be destroyed by repeated freezing and thawing of the soil, which can heave unmulched plants out of the ground.

Strawberries should be mulched in fall before temperatures drop below +20 F. However, allow the strawberry plants to harden or acclimate to cool fall temperatures before mulching the planting. Plants that are mulched prematurely are more susceptible to winter injury than those that are mulched after they have been properly hardened. In northern Iowa, strawberries are normally mulched in late October to early November. Gardeners in central and southern Iowa should mulch their strawberry plantings in mid-November and mid- to late November, respectively.

What materials are suitable for mulching strawberries?

Excellent mulching materials include clean, weed-free oat, wheat or soybean straw. Chopped cornstalks are another possibility. The depth of the mulch should be 3 to 5 inches at application. The material should eventually settle to 2 to 4 inches.

In windy, exposed areas, straw mulches can be kept in place by placing wire or plastic fencing over the area. The

fencing can be held in place with bricks or other heavy objects.

Are leaves a suitable mulch for strawberries?

Leaves are not a good winter mulch for strawberries. Leaves can mat together in layers, trapping air and creating space for ice to form. The leaf, air and ice layers do not provide adequate protection. Leaf mulch actually may damage plants due to excess moisture trapped under the material.

How do I protect strawberry plants growing in a strawberry pyramid?

A strawberry pyramid is a type of raised bed. In winter, temperatures in raised beds may be several degrees colder than ground level plantings. Because of colder temperatures, strawberry plants growing in raised beds require more protection than ground level sites. Place 6 to 8 inches of straw or chopped cornstalks on strawberry pyramids or other raised beds in fall.

How do I protect strawberry plants growing in a strawberry jar?

Strawberry plants growing in a strawberry jar or other container likely will be seriously damaged or destroyed if left outdoors in winter. One option is to place the container in an attached, unheated garage in November. A second option would be to discard the strawberry plants in fall, dump out the potting soil, store the container indoors in winter and replant in spring. Day-neutral and everbearing strawberry varieties perform better in containers than June-bearing strawberries.

We enjoy the blooms and fragrances of many types of roses during the summer. But some varieties of roses are not reliably winter hardy in Iowa. Hybrid tea roses often require protection to ensure winter survival. Iowa State University Extension horticulturists offer these tips to protect roses and increase their chances of surviving Iowa's harsh winter weather. To have additional questions answered contact the Hortline at 515-294-3108 or hortline@iastate.edu.

When should I prepare my hybrid tea roses for winter?



Prepare hybrid tea, grandiflora and floribunda roses for winter after the plants have been hardened by exposure to several nights of temperatures in the low to mid-twenties. Normally, this

is early November in northern Iowa, mid-November in central areas and late November in southern counties.

How should I prepare my hybrid tea roses for winter?

Most hybrid tea, grandiflora, floribunda and other modern roses require protection during the winter months. Low temperatures and rapid temperature changes in winter can severely injure and sometimes kill unprotected modern roses (most old garden roses possess excellent cold hardiness and don't require winter protection).

Hilling or mounding soil over the base of each plant is an excellent way to protect hybrid tea, grandiflora and floribunda roses. Begin by removing fallen leaves and other debris from around each plant. Removal of diseased plant debris will help reduce disease problems next season. Then, loosely tie the canes together with twine to prevent the canes from being whipped by strong winds. Next, cover the bottom 10 to 12 inches of the rose canes with soil. Place additional material, such as straw or leaves, over the mound of soil. A small amount of soil placed over the straw or leaves should hold these materials in place.

How should I overwinter a rose growing in a pot?

A rose growing in a pot may be destroyed if the potted rose is left on a deck or patio over winter. Potting soil temperatures in containers left above ground are likely to get extremely cold, damaging or destroying the roots of the rose.

To protect a potted rose, dig a hole in the ground in a sheltered location. Set the pot in the ground and then place soil around the pot. Place additional soil over the rose covering the bottom 6 to 8 inches of the rose canes.

Potted miniature roses can also be brought indoors before a hard freeze in fall and placed in a south or west-facing window and maintained as a houseplant.

How can I prevent rabbits from damaging my roses in winter?

The best way to prevent rabbit damage to roses in the home landscape is to place chicken wire fencing or hardware cloth around the plants. To adequately protect plants, the fencing material needs to be high enough that rabbits won't be able to climb or reach over the fence after a heavy snow. In most cases, a fence that stands 24 to 36 inches tall should be sufficient. To prevent rabbits from crawling underneath the fencing, bury the bottom two or three inches below the ground or pin the fencing to the soil with u-shaped anchor pins.

How should I prepare my garden tools for winter?

Proper care of garden tools and equipment prolongs their lifetime, prevents costly repairs and improves their performance. In fall, remove caked-on soil from shovels, spades, hoes and rakes with a wire brush or a stiff putty knife. Wash the tools with a strong stream of water; then



dry. Sharpen the blades of hoes, shovels and spades. Wipe the metal surfaces with an oily rag or spray with WD-40. Sand rough wooden handles, then wipe with linseed oil to prevent drying and cracking. Hang or store the tools in a dry location. Drain water from garden hoses. To prevent kinking, store hoses on reels

or coil and place on a flat surface.

Start the lawn mower and let it run until it is out of gas. Change the oil on mowers with four-cycle engines. Clean the air filter. Check the spark plug and change it if worn. Remove grass and other debris from the underside of the lawn mower. Sharpen the mower blade. Finally, store the lawn mower in a dry location.

How should I store garden pesticides over winter?

Keepesticides in their original containers and store them in a cool, dry location out of the reach of children and pets, preferably in a locked cabinet. Do not allow granular materials to get wet or liquid products to freeze. Moisture may cause granular products to cake. Freezing of liquid pesticides may reduce their effectiveness. Freezing temperatures may also cause some types of containers to break. See the product label for specific storage requirements.

What is the best way to store an opened bag of lawn fertilizer?

Store lawn and garden fertilizers in their original bags or containers so you will know the content and analysis of the product next season. Store granular fertilizers in a protected location where they will remain dry. Granular products absorb moisture from the air, causing them to cake like cement. An excellent way to store opened bags of lawn or garden fertilizers is to place the bags in large containers, such as five gallon buckets, and cover with tight-sealing lids.

About the Authors: [Richard Jauron](mailto:rjauron@iastate.edu), Horticulture, 515-294-1871, rjauron@iastate.edu; [Willy Klein](mailto:wklein@iastate.edu), Extension Communications and External Relations, 515-294-0662, wklein@iastate.edu.

Forcing Amaryllis and Paperwhite Narcissus Indoors

By Richard Jauron, Department of Horticulture

Forcing flower bulbs indoors is an excellent way to brighten the cold, gray days of winter. Two of the easiest bulbs to force indoors are the amaryllis and paperwhite narcissus (daffodil).

Amaryllis

Amaryllis bulbs can be purchased pre-planted in pots or unpotted. When purchasing unpotted amaryllis bulbs select large, solid bulbs. The largest bulbs often produce 2 flower stalks. Gardeners can choose from single-flowering, double-flowering, and miniature varieties. Flower colors include red, pink, orange, salmon, white, and bicolors.

When planting an amaryllis bulb, select a pot which is approximately 1 to 2 inches wider than the diameter of the bulb. The container may be clay, ceramic or plastic, but should have drainage holes in the bottom. Plant the bulb in a well-drained potting soil. Add a small amount of potting soil in the bottom of the pot. Center the bulb in the middle of the pot. Then add additional potting soil, firming it around the roots and bulb. When finished potting, the upper one-half of the bulb should remain above the soil surface. Also, leave about one inch between the soil surface and the pot's rim. Then water well and place in a warm (70 to 75 degree Fahrenheit) location.

Check the pot before watering a pre-planted amaryllis bulb. If the container doesn't have drainage holes, remove the bulb and replant it in a pot with drainage holes. Water well.

After the initial watering, allow the soil to dry somewhat before watering again. Keep the soil moist, but not wet. When growth appears, move the plant to a sunny window and apply a water-soluble fertilizer ever 2 to 4 weeks.

During flower stalk elongation, turn the pot each day to keep the flower stalk growing straight. Flower stalks that lean badly will need to be staked.

Flowering usually occurs about 6 to 8 weeks after potting. When the amaryllis begins to bloom, move the plant to a slightly cooler (65 to 70 degree Fahrenheit) location that doesn't receive direct sun to prolong the life of the flowers.

Some individuals discard their amaryllis after it is done blooming. However, if given proper care, it is possible to save the amaryllis and force it to flower again next winter.

Paperwhite Narcissus

Paperwhite narcissus produce clusters of small white, yellow, or orange flowers on 12- to 18-inch-tall stems. The flowers of most varieties produce a moderate to strong musky fragrance. Paperwhite narcissus bulbs can be forced in clear, shallow bowls (no drainage holes) or pots.

When forcing paperwhite narcissus in bowls, partially fill the container with washed gravel or stones. Place the bulbs on the gravel or stones. Then place additional gravel or stones around the bulbs, leaving the tips (noses) of the bulbs exposed. Add water to the bowl until it touches the bottom of the bulbs. Maintain the water at this level throughout the forcing period.

When forcing paperwhites in pots, partially fill the

container with potting soil. Place the bulbs on the soil surface. Then add additional potting soil. When potted, the tips of the bulbs should stick above the potting soil. Water the potting soil thoroughly. Keep the potting soil moist throughout the forcing period.

Place the planted bulbs in a cool (50 to 55 degree Fahrenheit), dark location for 1 to 2 weeks to encourage root growth. When the shoots reach a height of 3 inches, move the plants to a sunny window with a temperature of 60 to 70 degrees Fahrenheit. As the plants continue to grow, staking is often necessary as the plants are rather floppy. Flowering typically occurs 3 to 6 weeks after potting. When the paperwhites begin to flower, move the plants from direct sunlight to prolong their bloom period.

Paperwhite narcissus bulbs should be discarded after flowering. Paperwhites cannot be successfully forced again and are not winter hardy outdoors.

Weed Identification Guide

By Daren Mueller, Department of Plant Pathology & Microbiology

Though primarily intended for farm crop producers and consultants, the ISU Extension Weed Identification Field Guide, CSI 0003, should also be useful to horticulturists, Master Gardeners and homeowners who want to better understand weeds and their life cycles.

The Weed Identification Field Guide is now available electronically as an e-book and, for the first time, downloadable on iPad. The publication is distributed by the Iowa Soybean Association (ISA) and Iowa State University (ISU) Extension and Outreach. Pioneer Hi-Bred, a DuPont business, has sponsored the capability for users to download the electronic versions for no charge.

The Weed Identification Field Guide includes images and descriptions of 56 broadleaf weeds and 19 grass and grass-like weeds, and tools to aid in accurate weed identification.

Read more in the [ISU Extension and Outreach news release](#) from November 7, 2011.

Houseplant Care in Winter

By Richard Jauron, Department of Horticulture

Indoor plants help create a welcoming, calming, aesthetically pleasing environment in homes. In fact, more than 80 percent of homes in the United States have at least one houseplant, with a national average of 10 plants per household. Learn more about caring for the few hundred plants that lend themselves well to indoor culture from the [ISU Extension and Outreach Yard and Garden news release](#) from November 9, 2011.

Winter Protection for Strawberries

By Richard Jauron, Department of Horticulture

Mid-November is the time to apply mulch to strawberry beds to protect them through the winter. Clean, weed-free oat, wheat or soybean straw or chopped cornstalks should be applied in a 3 to 5 inch layer to protect the plants and next season's crop. Read more in the [ISU Extension and Outreach Yard & Garden news release](#) from October 26, 2011.

Recent Bed Bug Resources of Note

By Donald Lewis, Department of Entomology

An avalanche of information is coming at us about bed bugs. For those interested in some recent developments and/or resources, here are links of possible interest. Enjoy.

[Webinar on Insecticide Resistance in Bed Bugs](#) (a major problem!) by Colby Schal, North Carolina State University. Bottom line: do-it-yourself, over-the-counter insecticides are not effective because of resistance. Professional treatment is recommended.

[Pesticide overuse becoming an issue](#). A disturbing aspect of the bed bug problem is overuse and unsafe application of insecticides for bed bug control. The CDC found 111 cases of acute illness associated with bed bug-related insecticide use in 7 states analyzed (2003 – 2010, though 73% of the cases happened in 2008-2010). Eighty-one percent of illnesses were of low severity. The analysis included one fatality from insecticide over-application.

[Health News Daily summary of CDC report](#)

[Polk County Health Department bed bug brochures and guidelines](#) (schools, child cares, shelters, etc.).

[Polk County Health Department Interview](#) with "Bert the Bed Bug"

[Iowa Department of Public Health Fact Sheet](#)

[Illinois Department of Public Health bed bug fact sheets](#) (schools and daycares, health care facilities, etc.)

Larger Yellow Ants

By Laura Jesse, Plant & Insect Diagnostic Clinic

Larger yellow ants are one of my favorite insects. They have a pleasant lemon or citronella odor when crushed (of course the crushing is not pleasant to them!). Larger yellow ants are harmless and are never found foraging in kitchens. Larger yellow ants feed off the honeydew of root aphids. I was lucky enough to catch a small group of larger yellow ants caring for their aphids. They probably removed them from the plant roots and were caring for them over the winter. They were under a rock in my garden.

If you would like to learn more about larger yellow ants please see [this article](#).



Larger yellow ants are pale tan or orange in color with very small eyes. Here the ants are picking up and moving their aphids after I disturbed them.



Ants with many aphids in a small pocket in the soil under a large rock.



You can see the aphids a bit better in this image. At first I thought the ants were moving their larvae or pupae, but ant larvae and pupae do not have legs!

Gardening Tip:

A tip I learned from Grandpa. How to keep your garden tools clean. Fill a 5 gallon plastic bucket with sand and mix in used motor oil. Take your tools shovels, trowels, knives, etc and jam them a few times into the bucket. They will come out clean and stay rust free. **Patrick McCarthy submitted this gardening tip.** If you have any tips that will help other gardeners, please email them to me at gordycat24@aol.com. **Please put the words Gardening Tip in the subject line** and I will put them in upcoming newsletters. Thanks for sharing your tips. **Mary Ann Emery**

Iowa State University and U.S. Department of Agriculture Cooperating Extension programs are available to all without regard to race, color, national origin, religion, sex, age, or disability.