

# Plant Wise

IOWA STATE UNIVERSITY  
University Extension

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## Let's Blame the Poinsettias



*The poinsettia's true flower is the small cluster in the center of the colorful bracts.*

By Cindy Haynes  
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I am always amazed at how quickly the Christmas season arrives each year. It seems like yesterday that I was passing out Halloween candy to traveling ghosts, goblins and princesses. But today, I see poinsettias in bloom and ready for sale. Maybe we can blame the earlier and earlier arrival of Christmas decorations on the poinsettia. This may be a bit far-fetched, but if the poinsettia wasn't bred to be so easy to grow and last for months in bloom maybe we wouldn't see it so early or expect them to last until St. Patrick's Day.

Poinsettias weren't always as long lasting. In fact, poinsettias haven't always been a symbol of the upcoming holiday season. In less than a century, poinsettias have gone from being an obscure shrub native in Mexico, to a cut flower and landscape plant in California, to the number one flowering potted plant sold in the United States. In less than a generation, the traditional red poinsettia has morphed into a holiday plant available in a rainbow of colors that easily blend with any décor. Poinsettias are now pink, white, peach, plum, yellow, cranberry, marbled, spotted and can even be dyed blue. Who knows what the next generation of poinsettia breeding can bring to the holiday season decorations?

## Picking the Perfect Poinsettia

In the next couple of weeks finding a poinsettia to purchase will be easy. However, choosing the best plant to last for months in your home isn't quite as easy. Part of the trick to picking the perfect poinsettia is looking beyond the bows, baskets and pot liners. These decorations can make any plant look good, but a healthy plant will look good without decoration and last longer indoors. Healthy plants have a full complement of leaves. The leaves should be dark green and free of brown edges. The bracts (showy, colorful leaves which most people think are the flowers) should be fully colored and not damaged. Finally, check the true flowers in the center of the bracts. They should be greenish-yellow and sometimes have pollen. This means the plants are fresh and they should last a long time once you get them home.

When taking plants home, be sure to wrap them carefully to prevent injury from cold temperatures outdoors. Poinsettias can be damaged by even brief exposures to low temperatures. Transfer the wrapped plants into warm cars as quickly as possible. Once at home, unwrap plants carefully and place them in a bright, well-lit location, but away from hot and cold drafts. Ideal daytime temperatures are 60-70 F, and night time temperatures around 55-60 F are best.

Check the soil frequently to see if plants need water. Water when the surface of the soil dries out. Water thoroughly so that water runs out the bottom of the container. Discard any excess water that collects in saucers. Wait to fertilize plants in early spring – if you plan on keeping them that long.

Regardless of how early poinsettias arrive in your area this year, let's remember this brilliantly colored plant also has a brilliant past...and future. And if it reminds us, for a long time before and after, of the joyful holiday spirit of Christmas – then by all means let's blame the poinsettia!

### Poinsettia Trivia

- Poinsettias were introduced into the United States by Joel Poinsett, our first ambassador to Mexico, in 1825.
- Dec. 12 is National Poinsettia Day.
- The showy colored parts of the poinsettia are called bracts and are technically leaves.
- Ninety percent of all poinsettias are exported from the United States.
- More than 60 million poinsettias, worth more than \$200 million, are sold each holiday season.
- Almost 75 percent of Americans still prefer red poinsettias over other colors.
- Poinsettias are the most popular flowering potted plant, even though most are sold in a six-week period before Christmas.
- Poinsettias are not poisonous.

### Brighten Your Winter Landscape with Songbirds

By Megan McConnell  
Iowa State University Horticulture Graduate



Does your landscape look a little lonely this time of year? Stately maples are standing without their leafy mantles and perennial beds are hunched over for a midwinter nap. Liven things up by inviting some winged visitors to your yard. Both you and the birds will benefit from your hospitality -- the birds appreciate the supplement to their winter diet, and your landscape will come alive with activity.

Issuing the invitation is simple. Provide the birds with the essential items for creating a habitat and they will make your yard a regular stop on their daily travels. A habitat has four essential factors: space, food, water, and shelter.

Space is the area needed by the birds. Just as some people are happy in a city apartment and others need to be surrounded by acres of open land, some bird species need more space than others. Space is not a factor that can be manipulated to attract birds in most cases. The landscape that makes up your yard and that of your

neighborhood is the space you have to offer birds and will determine what species visit your landscape.

While you can do little to change the physical space available to birds in your landscape, there are many things you can do to enhance the food, water, and shelter available to feathered friends.

### Wintertime Feast

Birds gather food from many landscape plants during the winter months. Trees such as hawthorns (*Crataegus* species), common hackberry (*Celtis occidentalis*), and crabapples (*Malus* species) provide fruit for birds in late fall and winter. These natural sources of food are where birds garner most of their energy.

Food provided by humans is merely "icing on the cake." White proso millet, niger thistle seed, and black (oil-type) sunflower seeds are sweet treats. The importance of these foods comes into play during particularly harsh winters. Birds that have supplemental feeding will be more likely to withstand harsh conditions.

Birds have preferences when it comes to types of food. To attract a certain species of bird, offer their favorite food. Goldfinches, for example, favor niger thistle seed. (Thistle seed is not related to the weedy thistles. This seed is not adapted to northern climates.) Cardinals, chickadees, and mourning doves all like black sunflower seeds.

Not all birdseed mixes sold at retailers are the same. One of the best mixes for attracting a variety of birds is 50 percent black sunflower seeds, 35 percent white proso millet, and 15 percent cracked corn. Avoid seed mixes that contain milo (sorghum) and wheat - these seeds are not preferred by most birds.

Not only do birds have favorite foods, but they also have favorite feeders. Use a combination of platform feeders, traditional wooden house feeders, and tube feeders to attract a variety of birds. When placing feeders be sure they are visible through a window so you can enjoy your winged visitors. Also, locate feeders near cover -- shrubs, trees or both -- to provide a place of retreat from cats or other threats and a gradual approach route for "shy" birds.

We can't talk about bird feeding without mentioning the bushy tailed animals that like to partake in the birds' feast. Squirrels are a menace to the feeding stations. Deter them by placing the feeder at least 5 feet above the ground and consider placing a sheet metal cone around the pole to thwart their attempts to climb up to the feeder. In most cases squirrels' acrobatic feats eventually overcome your anti-squirrel scheming.

### **Ice-free Water Source**

Water is another basic habitat requirement and is often missing in the frozen winter landscape. Equipping a birdbath with a heater can provide ice-free water. Commercial heaters are available at garden stores, feed stores, and other stores that sell birding supplies. If birds don't seem to notice the water in your landscape, create a slight drip with a hose or faucet to disturb the surface and alert the birds to the water source.

Regular cleaning of the feeder and water supply is necessary for a healthy bird population. High concentrations of birds at feeders facilitate the spread of disease. As droppings accumulate around the feeder, problems increase. It is a good idea to clean your feeder once a week. Painted, varnished, or metal feeders can be cleaned easily by dunking them in a weak bleach solution. Maintain a fresh water source by changing the water regularly.

### **Get Out of the Wind**

All birds need shelter for cover, roosting, and nesting. If you provide shelter in your landscape, birds are more likely to make your yard a permanent home. In the fall and winter birds are looking for cover in the landscape. Dense evergreens and shrubs provide the most protection from whipping winter winds. Shelter can be found in temporary structures too. A brush pile has many crevices for birds to escape the winter weather. Discarded Christmas trees are another great source of winter protection. Prop your Christmas tree up near a feeder or water source for cover while the birds are feeding.

If you are looking to add a little excitement to your winter landscape, make sure songbirds are on your guest list. Provide the space, food, water, and shelter and winged visitors will be dropping by for a visit.



### **Oh Christmas Tree**

Thinking of starting a new tradition this year of picking out your Christmas tree at a “choose and harvest” tree farm? [www.iowachristmastrees.com](http://www.iowachristmastrees.com) has information on local tree farms, descriptions of the different species used for Christmas trees, tips on preserving and recycling your Christmas tree plus fun facts about Christmas trees.

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

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### **Are the white-barked birches a good choice for home landscapes in Iowa?**

Unfortunately, the white-barked birches, such as paper birch (*Betula papyrifera*) and European white birch (*Betula pendula*), are not well adapted to our climate and usually succumb to the bronze birch borer. The river birch (*Betula nigra*) is a better choice for Iowa. Well adapted to stream banks and other moist sites, river birch develops a papery bark that peels away to expose a cinnamon-brown to reddish-brown inner bark. River birches exhibit tremendous variation in bark color, but the cultivar ‘Heritage’ consistently produces white to salmon-white bark on young wood, darkening to salmon-brown as the tree ages.

### **How can I accelerate the decomposition of leaves in my compost pile?**

Leaves contain high levels of carbon and small amounts of nitrogen. The microbes that decompose leaves and other types of organic matter require nitrogen for their own metabolism and growth. A compost pile composed mainly of leaves decomposes slowly because the leaves don't contain adequate levels of nitrogen for the microbes.

To promote decomposition, mix leaves with grass clippings or other materials high in nitrogen. If possible, shred the leaves prior to composting. The

smaller the size of the material, the faster the rate of decomposition.

Construct the compost pile in layers. Each 6- to 8-inch layer of plant material should be topped with 1 inch of soil or compost. A small amount of an all-purpose garden fertilizer, such as 10-10-10, can also be added to supply nitrogen to the microbes. Continue to build the compost pile in layers until it is 3 to 5 feet high.

Finally, water the pile regularly and turn it about once every two weeks.

## How do I get rid of moles in my yard?

Trapping is the best way to get rid of moles. Trapping isn't easy, but it does work. Persistence is required. Traps can usually be found in hardware stores and garden centers. When using traps, carefully follow label directions.

Attempts to kill moles with poisoned baits are usually unsuccessful as moles feed primarily on earthworms, insect larvae, millipedes, and centipedes and rarely eat baits. Depriving the moles of their food supply isn't a viable option either. White grubs (insect larvae) can be controlled with insecticides. However, eliminating the earthworms is not practical. (Insecticides do not control earthworms.)

## DECEMBER GARDENING TO DO LIST



- Check any holiday plants you purchase or receive for pests to prevent infestation of your other houseplants.
- Finish winter protection chores that did not get done last month.
- Shield plants from street and sidewalk salt spray. Use calcium chloride, rather than sodium chloride, to de-ice sidewalks and driveways.
- Do not use softened water on houseplants.
- Store leftover garden chemicals where they will stay dry, unfrozen, and out of reach of children and pets.
- Order a 2009 Garden Calendar from the Mills County Extension office.
- Prune off a few branches of Red Twig Dogwood, Juniper, Winterberry, Arborvitae, and Yews. Add these to your indoor or outdoor holiday décor.
- When shopping for a Christmas tree, check for green, flexible, firmly held needles and a sticky trunk base, both indicators of freshness.

## JANUARY GARDENING TO DO LIST



- Cut branches from Christmas tree and lay over perennials that are susceptible to winter injury.
- Keep bird feeders filled. Remember to periodically clean feeders and water containers.
- Check tender bulbs kept in storage, and discard any that show signs of decay, such as mold or softening. Shriveling indicates insufficient relative humidity.
- Turn houseplants occasionally to prevent one-sided growth.
- Check young trees for rodent injury on lower trunks. Prevent injury with hardware cloth or protective wraps.
- Check on stored vegetables. Discard any that are shriveled or rotten.
- Gather and organize seed starting equipment and supplies. Find an area where you can place flats near a window or under artificial lights.
- Do not shake or brush frozen snow off shrubs. This can cause more damage than if the snow was left in place.

## Butterflies in Winter

By Donald Lewis  
Extension entomologist  
Iowa State University



It's a cold, cruel world out there in the landscape this time of the year. And delicate, cold-blooded creatures such as butterflies face a formidable challenge just to stay alive through one of nature's most inhospitable periods, winter on the Great Plains.

But butterflies and other insects do survive, and have been doing so for a long, long time. In fact, it is not too difficult to believe that insects are better equipped for this frigid time of year than our own species.

Insects, like snakes, frogs and turtles, are cold-blooded. Their body temperature rises and falls with the temperature surrounding them. This is the opposite of what people and other warm-blooded animals do. We maintain a constant, warm body temperature through all extremes with elaborate energy-using tricks to warm us when the world is cold, and to cool us off when it is hot.

Cold-blooded animals such as insects fight no such temperature-regulating battles. Their body temperature is hot in the summer and cold in the winter. This adaptation (go with the temperature flow) allows them to survive the winter with seeming ease.

There is a down-side to the cold-blooded lifestyle. At cold temperatures insects become inactive and exist in a state of dormancy similar to "suspended animation." During the cold-induced dormancy period, an insect cannot eat, grow, develop, reproduce or even move around. Dormancy is an adaptation that improves the chances of surviving until warm temperatures return.

Each insect species has a range of temperatures suitable for activity. When an insect is either too hot or too cold it becomes dormant. It is active only at temperatures between the two extremes. As a rough rule-of-thumb, insects are active between 45 and 100 degrees F.

### Where Do Butterflies Go?

To understand how an insect such as a specific kind of butterfly survives the winter, it is necessary to think about the life cycle. Butterflies have a complete life

cycle of four stages: egg, caterpillar, chrysalis and adult.

For most species of butterflies, only one stage is adequately equipped (that is, programmed or prepared) to last through the winter, although it can be a different stage for different species. For example, swallowtail butterflies overwinter in the chrysalis stage attached to the plant foliage where the caterpillar fed. The white cabbageworm butterfly and the related orange sulphur butterflies also winter as a chrysalis. The viceroy and the checkerspot, on the other hand, survive as partly grown caterpillars.

Only a few butterflies can make it through an Iowa winter in the adult stage. These include the fritillary, the mourningcloak, the painted lady and the red admiral.

The most famous butterfly, the monarch, doesn't stay in Iowa for the winter at all. Monarchs leave in the fall and migrate to central Mexico to spend the winter. The monarch must be re-introduced into the state every spring by north-bound dispersal of last year's butterflies and their offspring.

### Why Don't They Freeze to Death?

The overwintering stages of insects are equipped with one or more "tricks" that increase the chances of survival. One is the hiding behavior seen in the fall. Insects that were active just a few short weeks ago didn't all die. Some went into hiding and are concealed under loose bark, leaf litter, rocks or debris. Others are a few to several inches deep in the soil.

A more important preparation that takes place in the fall involves subtle changes in body chemistry. Many insects reduce the water content of their bodies and produce glycerol and other protective compounds that lower the freezing point of the body fluids. These natural antifreeze compounds essentially "winterize" the insect in preparation for below-freezing temperatures.

### So, Do Butterfly Boxes Work?

Butterfly boxes also are known as butterfly roosts and hibernation houses. Advertisements claim these bird house-sized structures will encourage butterflies to stay in your garden by providing necessary shelter. It is tempting to dismiss these well-intentioned accessories as worthless, but that's not quite true. They can be an attractive and artistic addition to the garden and they also

announce to visitors (that is, people) your intentions to have a butterfly-friendly place.

But the butterflies couldn't care less. Several studies show that the boxes are virtually never used except by spiders, wasps and mice. The few butterflies that do remain for the winter appear to find sufficient natural hiding places under dead leaves, twigs and wood piles, where they hang upside down with their wings folded together.

The best encouragement for butterflies is to diversify your landscape. Plant a wide variety of flowers and plants that are attractive to butterflies and that will feed the hungry caterpillars. And remember to reduce insecticide use as much as possible.



## 53<sup>rd</sup> Annual Iowa State University

### Shade Tree Short Course and INLA Tradeshow

February 25-27, 2009

New for 2009! Iowa State's Annual Shade Tree Short Course is teaming up with the Iowa Nursery and Landscape Association in 2009. The program highlights the best of both worlds incorporating INLA's long-standing trade show into the traditional Shade Tree Short Course educational sessions. The event will take place in Ames at the Scheman Building.

Registration begins in early January.  
For more information go to:

[www.ucs.iastate.edu/mnet/shadetree/home.html](http://www.ucs.iastate.edu/mnet/shadetree/home.html)

*"At Christmas, I no more desire a rose than  
Wish a snow in May's newfangled mirth;  
But like each thing that in season grows."*

- William Shakespeare



From your county Extension Staff:

*Sherry Ford*, Extension Director  
*Susan Perkins*, Office Assistant

*Sarah Naeve*, Youth Coordinator  
*Denise Fikes*, Horticulture Assistant



"There are two seasonal diversions that can ease the bite of any winter. One is the January thaw. The other is the seed catalogues."

- Hal Borland

### 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

RG 316 Poinsettia Care (free)  
RG 308 Growing Holiday Cacti (free)  
RG 402 Lighting & Houseplants (free)  
RG 205 Store Pesticides Safely (free)  
RG 601 Gardening for Butterflies (free)  
RG 0105 Garden Tips: Guidelines to Seasonal Chores (Free)  
RG 206 Questions About Composting  
PM 815 2009 Garden Calendar (\$6.00)

Horticulture Publications on-line  
[www.extension.iastate.edu/store](http://www.extension.iastate.edu/store)



