Prepare the Garden for Winter

By Jennifer Schutter, Horticulture Field Specialist, Adair County

Preparing the garden for winter marks the end of the growing season. While it may seem like there is not much to do in the garden in late fall, there are several tasks that must performed to protect plants from the harshness of winter weather.

Start with cleaning up the garden. Remove spent flowers and vegetables, and if not diseased or insect infested, add them to the compost pile. Cut back faded or dead foliage on perennials after the first hard frost, unless they add color to the garden in the dreary winter months or provide seed for the birds. Leave dead foliage on chrysanthemums. Research has proven that chrysanthemums not cut back over winter better than those whose foliage has been removed.

Apply a 2-4 inch layer of mulch around perennial plants, shrubs and bulb beds to protect them from the elements of winter. Sources of organic mulch include shredded leaves, pine needles, wood chips, or gravel. Do not use unshredded leaves that may mat down and suffocate plants. Bulb beds can be covered with evergreen boughs.

Modern, bush-type roses (hybrid teas, floribundas, and grandifloras) require protection during the winter months. Exposure to low temperatures and rapid temperature changes can severely injure and often kill unprotected roses. Hilling or mounding soil around the base of each plant is a way to protect bush type roses.

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Mound soil 10 to 12 inches high around the base of the canes. 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. Prepare modern roses for winter after plants have hardened from several nights of temperatures in the low to mid-twenties. Most of the time ‘Knockout’ roses typically do not need this kind of protection, but some ‘Knockout’ roses have been winter killed. ‘Knockouts’ that have experienced winter damage in the past should be protected.

Strawberry plants are susceptible to winter injury. Temperatures below 200F may damage the roots and crowns of unprotected plants. Repeated freezing and thawing of the soil through the winter months can heave unprotected plants out of the soil and cause considerable damage. Apply 4-5 inches of straw mulch in late November or early December to strawberry beds. Allow strawberry plants to harden or acclimate to the cool fall temperatures before mulching the bed.

Southwest Injury is a very common winter injury to young trees in northern Missouri. Prevent Southwest Injury to young trees by wrapping newly planted, smooth barked trees, especially sensitive varieties like maples, crabapples and fruit trees with a light colored tree wrap. Late November or early December is the ideal time to wrap trees. Oak trees and other native hardwood trees typically do not need to be wrapped. Tree wrap can be purchased from a garden center or farm supply store. When wrapping trees, start at the bottom of the trunk and wrap up, overlapping the wrap. Wrap up to the first branch and then tape it off.

Protect young trees from hungry rabbits that often gnaw on the bark of many woody plants. The best way to prevent rabbit damage to young trees is to place a cylinder of hardware cloth (1/4 inch mesh wire fencing) around the tree trunk. The hardware cloth cylinder should stand about 1 to 2 inches from the tree trunk and 20 inches above the ground. The bottom 2 to 3 inches should be buried beneath the soil. Small shrubs, roses, and raspberries can be protected with chicken wire fencing.

Monitor potted plants brought inside after spending the summer outdoors. Yellowing and dropping of leaves is normal as they transition from outdoor conditions to the conditions inside your home. Watch for insects and control at the first sign. A few small insects can quickly turn into an infestation.

Clean soil and mud off all garden tools and store them in a shed for winter. Drain water hoses, put them, and yard ornaments away. Get out the bird feeders and place in ideal spots for winter bird feeding. Enjoy a few months off from gardening, but take time to reflect on this year’s gardening season and what you might add or change next year.
Prevent sunscald in young trees

When examining a young tree that is having major problems with cracking on its trunk, or possibly even losing bark, generally the initial cause of the problem is sunscald. Sunscald usually occurs when the tree is very young, with thin bark. It is most commonly seen on the southwest side of the tree, but can occur anywhere the sun can hit it.

Sunscald damage normally occurs in the winter, when the tree is subject to frequent freeze/thaw cycles. Think about it... you have a nice sunny January day, and the sun warms up the trunk, perhaps thawing it out. Then what happens that night, if the clear skies continue? The mercury heads for the bottom of the thermometer, and everything re-freezes.

This constant freezing and thawing damages the bark and a crack may develop which eventually widens and exposes the wood underneath the bark. Needless to say, this is a bad situation. If the tree is healthy and vigorous, some healing may occur. However, often the damage is permanent.

Trees that are most susceptible to sunscald damage have smooth, thin bark. These include most fruit trees, but also ornamental species such as maples, willows, oaks, and many more.

The key to sunscald prevention is to reflect light. In some places, people will paint the lower trunks of susceptible trees with a thin coating of white latex paint. Be sure it is latex paint, if you decide to take this approach.

The high-tech way to reflect light off the trunk of the tree is to use a tree wrap. The best kind for this purpose is the expandable white plastic type. This not only reflects light, and keeps temperatures cooler on the trunk of the tree, but it also offers some protection from nibbling animals such as mice, voles, and rabbits.

Late fall is a good time to put tree wrap around trees you wish to protect. It’s best to remove tree wrapping materials in the early spring. March would be ideal. If left on the tree, these wrapping materials may girdle the tree if they are too tight. The expandable tree wrap may prevent this to some degree, but it is a good idea to remove it every spring.

There is good news. As trees age, and develop thicker bark, they are less subject to sunscald. Therefore, as a thicker bark develops, you usually will not need to be putting tree wrap on your tree each fall.

WHAT AM I???

Find the answer somewhere in this newsletter :)

The Garden Path

NOVEMBER 2018
Saving and Starting Native Seeds – article timeline clarification

Please review this clarification of the timeline from the article in the October Garden Gate article. The timeline is an important part of the seed saving process. Corrections provided by Paula McBurnett, MG. If you have any questions contact Paula or Debi Kelly at the MU Extension office.

Early Winter - starting the seed

- Remove the bag of seeds with vermiculate from the refrigerator at the time indicated on the bag.
- The translucent jug should be cut as shown in the photos. Do not cut through the entire jug as you will want to leave a bit of plastic near the handle as a “hinge” to keep the top somewhat connected to the bottom, but so that you are able to open and close the top “lid.” Drill or punch ¼” holes in the bottom of the jug for drainage. Remove the lid to allow moisture to enter the jug after it is planted and sealed.
- Fill the bottom of the jug with moistened soilless potting mix.
- Plant seeds about 1” apart. Use the wax pencil on a mini-blind piece to label the seeds and poke into the soil inside the pot.
- Using the duct tape, seal the jug shut. Label the tree tag and attach to the handle of the jug.

Late Winter or Early Spring – transplanting the seedlings

- When the seedlings have grown their true leaves, you may remove the duct tape, open the jug and prepare the seedlings for transplanting to individual pots.
- At the transplanting stage, it is suggested that if you have room, move the transplanted plants inside in order to let them acclimate and get established without the challenge of wind and unpredictable weather. Keep the soil somewhat moist where the inside temperature is somewhat even. A basement climate is probably best. Then, after a few days, move the pots outside to a sheltered area, depending on temperature, to harden off before planting into the ground.
- When the seedlings are 4”-6” tall transplant into the ground. Liz also recommends waiting until fall to transplant into the ground, letting them continue to grow in the pots throughout the summer.
In the Spotlight is a Garden Path feature presentation. Send us your pictures with a short description of your accomplishments and opportunities.

Chestnut roast at the University of Missouri. Pictures provided by Dana Gisi.

Veterans Memorial Garden. Pictures provided by Gaye Counts.

Carol Kuntz at the Jefferson County Bicentennial Celebration in October at the Hillsboro Civic Center.
Calendar of Events

**NOVEMBER**
8   Success with Native Landscaping, Shaw Nature Reserve, Grey Summit, MO. Call 314-577-5140 (Level II class)
13  JCMG Bimonthly Meeting, Viking Room, Hillsboro MO. Presentation: Hazards in the Garden with Emily Crawford, Naturalist with Rockwood Reservation

**JANUARY**
10  Invasive Plant Identification and Control, Shaw Nature Reserve, Grey Summit, MO. Call 314-577-5140 (Level II class)
15  JCMG Bimonthly Meeting, Viking Room, Hillsboro MO. Elections!!

**FEBRUARY**
14  Greenhouse Propagation Native Plant, Shaw Nature Reserve, Grey Summit, MO. Call 314-577-5140 (Level II class)

Missouri Botanical Highlights

**Garden Glow**
November 17-January 1
Celebrate the season with over one million dazzling lights, fun new experiences and traditional favorites!
Enjoy s’mores, festive drinks, and great photo opportunities that will delight crowds of all ages!
Garden Glow Tickets now include admission to our Gardenland Express Holiday Flower and Train Show!

See more at: [www.missouribotanicalgarden.org](http://www.missouribotanicalgarden.org)

WHAT IS IT?
I’m a Hibiscus Flower stamen!

The hibiscus plant commonly seen in parks or garden is likely to be *Hibiscus rosa-sinensis* (Rose of China). It is attractive due to the usually large, trumpet-shaped and colorful flowers. Besides the ones with red flowers, there are plants with flowers of different color shades or combination of colors. The large petals form the colorful part of the flower. The plant is grown for its ornamental value. The flower usually lasts a day after fully bloom.
November Gardening Calendar

**Ornamentals**

- Continue watering evergreens until the ground freezes. Soils must not be dry when winter arrives.
- Now is the ideal time to plant trees and shrubs. Before digging the hole, prepare the site by loosening the soil well beyond the drip line of each plant. Plant trees and shrubs at the depth they grew in the nursery and not deeper. Remove all wires, ropes and non-biodegradable materials from roots before back filling. Apply a 2-3 inch mulch layer, but stay several inches away from the trunk. Keep the soil moist, not wet, to the depth of the roots.
- Mulch flower and bulb beds after the ground freezes, to prevent injury to plants from frost heaving.
- Roses should be winterized after a heavy frost. Place a 6 to 10-inch deep layer of mulch over each plant. Top soil works best. Prune sparingly, just enough to shorten overly long canes. Climbers should not be pruned at this time.
- Covering garden pools with bird netting will prevent leaves from fouling the water. Oxygen depletion from rotting organic matter can cause winter kill of pond fish.

**Vegetables**

- Fall tilling the vegetable garden exposes many insect pests to winter cold, reducing their numbers in next year’s garden.
- Any unused, finished compost is best tilled under to improve garden soils.
- To prevent insects or diseases from overwintering in the garden, remove and compost all plant debris.
- Root crops such as carrots, radishes, turnips and Jerusalem artichokes store well outdoors in the ground. Just before the ground freezes, bury these crops under a deep layer of leaves or straw. Harvest as needed during winter by pulling back this protective mulch.

**Fruits**

- Keep mulches pulled back several inches from the base of fruit trees to prevent bark injury from hungry mice and other rodents.
- Harvest pecans when they start to drop from trees. Shake nuts onto tarps laid on the ground.
- Fallen, spoiled or mummified fruits should be cleaned up from the garden and destroyed by burying.
- A dilute whitewash made from equal parts interior white latex paint and water applied to the southwest side of young fruit trees will prevent winter sunscald injury.
- Commercial tree guards or protective collars made of 18-inch high hardware cloth will prevent trunk injury to fruit trees from gnawing rabbits and rodents.
- Mulch strawberries for winter with straw. This should be done after several nights near 20 degrees, but before temperatures drop into the teens. Apply straw loosely, but thick enough to hide plants from view.

**Miscellaneous**

- Now is a good time to collect soil samples to test for pH and nutritional levels.
- Roll up and store garden hoses on a warm, sunny day. It’s hard to get a cold hose to coil into a tight loop.
- To prevent injury to turf grasses, keep leaves raked up off of the lawn.
- Continue mowing lawn grasses as long as they keep growing.
- Be sure to shut off and drain any outdoor water pipes or irrigation systems that may freeze during cold weather.
- Reduce or eliminate fertilizing of houseplants until spring.

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