

THE OUTSIDER

Illinois Extension Horticulture serving Henry, Mercer, Rock Island, and Stark



WINTER FOR TREES AND SHRUBS

Winter is coming and our trees and shrubs are going through the process of entering dormancy. Dormancy is the process of plants preparing soft tissues for weather conditions less hospitable for growth. In the Midwest, dormancy occurs during winter months when freezing temperatures, dry weather, and reduced day length make active growth challenging. In arid climates, many plants enter dormancy during seasons of drought.

In addition to the natural process of entering dormancy, there are activities and actions people can take to aid trees and shrubs survive through winter without additional stress.

ENVIRONMENTAL THREATS

Frozen temperatures, dry air conditions, and cold winds describe many Midwest winters. These conditions are challenging but even more challenging for plants that retain their leaves. By holding onto leaf material on a tree or shrub, evergreens are especially susceptible to desiccation. The leaves that persist through the winter are pathways for moisture to leave the plant through transpiration. During summer months, plants that are not able to replace moisture at equal rates of loss often exhibit wilting symptoms, especially near the end of the day. Overnight, transpiration rates decline so plants are able to replace moisture lost. During winter months, the soil is often frozen, making moisture replacement more challenging.



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To help evergreen plants minimize winter desiccation, ensuring adequate soil moisture availability during fall and going into winter will help plants begin winter well-hydrated. Woody plants can, and following seasons of drought, should be watered until the ground freezes. Soils freeze much later than when above-ground plant material goes dormant. Prior to the soil freezing, check soil moisture conditions and provide supplemental water if the soil profile is dry. Mulch should be reapplied if the spring application has decomposed. Hardwood mulch should be three to four inches thick in a ring around the plant. Mulch should not be piled up on or touching the plant, doing so can create an environment where rodents may nest and feed on the plant or where pathogens may thrive.

Conifers can also be wrapped in a breathable material to reduce winter injury. Using a commercially available wrap or burlap helps protect trees from winds and sun that contribute to water loss through transpiration. Wraps need to be removed in spring as dormancy is broken and plants begin active growth.

Sunscald can occur on the trunk of trees, especially thin-barked species. Sunscald can occur when sunlight warms tree trunks causing cells to break dormancy prior to the end of winter. On a tree, this looks like a vertical crack in the bark. To help minimize damage, wrap tree trunks in November and remove them in April.

WILDLIFE THREATS

Food sources are scarce during the winter and animals within our landscape are a threat to woody plant materials. To protect plants from rodent chewing keep grass brush material and mulch away from the base of a tree. Reduction of nesting habitat and protective cover from predation near the base of trees creates a less desirable space for animals that may chew on the plant materials. Broaden landscape clean up to reduce habitat by removing brush piles, cutting back grassy areas, and fencing hiding spaces such as under outdoor structures.



Rabbit damage on shrub
(photo by Emily Swihart)



Deer rubbing on tree trunk
(photo by Emily Swihart)



Sunscald (photo source: Bigstock)



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If animals can't physically reach plants, they can't cause harm. Using methods of exclusion keeps critters away from prized plants. A metal hardware cloth wrapped around the trunk of a tree or the base of a shrub physically keeps animals away. To prevent mouse access, the protection should be buried two to three inches below the soil surface line. To prevent rabbit damage, plan for the barrier to extend two feet above the snow line. Use two or three sturdy stakes to support the wrap while keeping it off the plant.

For small, single-stem trees, plastic guard wraps are also effective. White plastic wraps serve dual functions on thin-barked trees to keep rodents out and protect against sunscald. When applying and removing wraps, be careful not to damage the trunk.



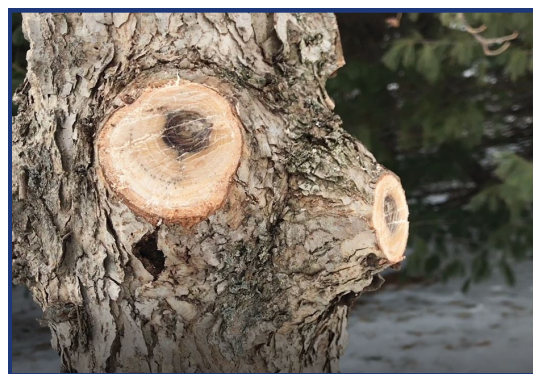
Protection and supplemental water on shrub prior to winter (photo by Emily Swihart)

PREPARE FOR ANNUAL MAINTENANCE

A certified arborist is a trained professional that specializes in tree care. These professionals can help with a wide range of tree-related topics including care and maintenance.

Pruning is a great way to promote healthy and safe trees but if done incorrectly, can be dangerous while doing the pruning and/or cause more harm than benefit to the tree.

Pruning in the dormant season is recommended, especially late winter just prior to spring's arrival. Call your local arborist to schedule an appointment for a tree assessment and maintenance activities before their spring schedule gets full. This is especially important if you have an oak or an elm tree that needs to be worked on during the dormant season to minimize the risk of oak wilt.



Pruning cuts on bur oak (photo by Emily Swihart)

CERTIFIED ARBORISTS CAN BE FOUND BY SEARCHING THE INTERNATIONAL SOCIETY OF ARBORICULTURE'S WEBSITE WWW.TREESAREGOOD.ORG

OUTSIDER ACTION

Try these activities to be more of an Outsider

- Install protection tree protections now and add a reminder to your calendar to check the protection weekly for maintenance needs.
- Provide supplemental water for newly planted trees before the ground freezes.

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