

IN THE DIRT

Become a Master Gardener

Classes are held once a year, beginning sometime between January and March. Contact your local county extension office to determine the training location closest to you. Enrollment may be limited based on available space.

Attendance is required for a minimum of 40 hours of education. Volunteers are considered Master Gardener Interns after they have completed the 40 hours of educational training and passed an open-book test with a 70% or better. A volunteer becomes a University of Nebraska Extension Master Gardener after 40 hours of volunteer activities is completed. This title is retained until the training sessions begin again the following year.

Winter Protection for Sensitive Plants

We've already had a fore taste of winter, both snow and cold temperatures, and we know there's only more to come over the next 4-5 months. While temperatures are still relatively warm, now is a good time to prepare your plants for winter to make sure they are healthy and beautiful next spring. Plants often suffer in winter from common problems such as winter desiccation, physical damage from a heavy ice and snow load, excess salt or wildlife damage.

Avoid Winter Desiccation - Winter desiccation is a common type of winter injury that occurs when the amount of water lost by the foliage exceeds the amount picked up by the roots. Browning of evergreen needles from the tip back towards the base is a typical symptom, as in the picture of white pine needles above. The key to preventing winter desiccation is to keep plants well-watered throughout fall and into winter. Monthly watering at times when the ground is not frozen can be very beneficial, including November and December, so don't put your hoses away too early. Be aware of plant water needs throughout winter, especially if we have another dry winter with little snow cover.

Another step you can take now to help conserve soil moisture for your plants throughout winter, is to apply a 3-6 foot diameter ring of mulch around the base of sensitive trees and shrubs, with 3-4 inches of an organic material like coarse wood chips.

Prevent Physical Damage - Wet snow and ice often results in a heavy load for tree and shrub branches, and can lead to limb

breakage. The heavy weight can also cause less obvious internal splits or cracks in trunks and limbs, which pose a risk long after the storm.

Arborvitae and pyramidal yew are two common shrubs benefiting from additional protection. One method that protects branches from breaking under heavy snow load is tying up each individual plant with heavy 3-strand jute twine. Start by tying the jute twine around the trunk at the base of the branches or to the base of one of the lower branches. Next, wrap the twine spirally up the plant, pulling the branches inward into a tight pyramidal shape, but don't pull the twine so tightly that you break any branches. The tighter conical shape created and extra support provided by the jute twine, helps plants shed snow more easily and prevents branch damage. Remove the twine in spring after danger of snow has passed. As the weather warms, branches will move back to their normal position.



When a heavy snow or ice load does occur, whether the plant has been tied up or not, let the ice melt naturally from tree limbs. If it is safe to do so, gently remove snow from limbs with a broom or rake. Hold onto the limb from below and gently brush off loose snow. Do not hit a branch to knock off snow or ice. Watch for falling limbs and ice from above. Do not try to dig snow away from shrubs as this leads to damaged limbs.

Protect Plants from Ice Melt Products - Snowblowers and shovels can't always remove compacted snow or ice on hard surfaces, so using a chemical deicer can be helpful including the common deicing compounds listed below. They may be used alone, or blended together to improve performance or reduce damage to concrete or landscapes.

Products are listed in order of potential plant damage, with the most damaging first.

- Sodium chloride is the least expensive product and commonly used on roadways. It has a high burn potential for landscape plants.
- Urea can harm landscape plants and cause runoff pollution in ponds and waterways.
- Potassium chloride, also known as muriate of potash, is less damaging than sodium chloride.
- Calcium chloride is the most effective deicing product at low temperatures, down to -25°F. Will not damage vegetation if used as directed.
- Magnesium chloride is sprayed on roadways before a snowstorm to prevent ice bonds from forming, making ice and snow removal easier. It causes very little damage to concrete or metal. It's also gentle on landscape plants and pet safe if used as directed. It also doesn't track into the house.
- Acetates can be found in three forms- calcium magnesium acetate (CMA), sodium acetate and potassium acetate. CMA is a salt-free product and is the safest product for use around pets and landscape plants. CMA is made from dolomitic limestone and acetic acid (the principal component of vinegar). Studies have shown the material has little impact on plants. It also has a very low level of damage to concrete or metal.

To protect your landscape and pets, look for products like:

- SafeStep Sure Paws, contains magnesium chloride/potassium sulfate
- Melt- Environmentally Friendly Blend Ice Melter, contains calcium magnesium acetate.

Also keep on hand products that improve your footing on slick surfaces, like sand, sawdust, or cat litter. They can be used instead of traditional deicing products, or blended with them to improve traction and limit deicer use.

Although salt is applied throughout the winter, most salt damage occurs in late winter and early spring when plants are beginning active growth and excess salts are pulled into the plant. So it is particularly important to protect plants during this time, and limit salt use in late winter.

Using the smallest amount of product needed to manage ice will also minimize landscape damage. Avoid piling snow containing salt around sensitive plants, such as redbud, hackberry, hawthorn, crabapple, pin and red oak, littleleaf linden, barberry, boxwood, dogwood, spirea, Viburnum, Balsam Fir, White Spruce, White Pine, Scotch Pine, Yew, Arborvitae and Hemlock.



Rabbit damage, bark stripping, on euonymus

Protecting Plants from Sunscald and Wildlife - Prevent sunscald on young, thin-barked trees by shading the south and west face of the tree's trunk with a white painted piece of wood, pounded into the ground in front of the tree. Or use a section of black drain tile, slit down the side, then fit around the tree's trunk.

Protect trees from rabbit and vole damage by wrapping the trunks with ¼ inch hardware cloth. The cylinders should extend higher than a rabbit's reach while standing on the expected snow depth, and stand 1 to 2 inches (2.5 to 5 cm) out from the tree trunk. Usually a height of 2-3 feet is sufficient. Bury the bottom edge of the cylinder 2-3 inches in the soil to prevent voles from going under it.

Note: Reference to commercial products or trade names is made with the understanding that no discrimination is intended. These products are listed as examples only. No endorsement by the University of Nebraska-Lincoln is implied. Source: <https://acreagenebraska.org/2019/11/06/winter-protection-for-sensitive-plants/#more-830>