

Protect Your Garden Plants This Winter



As cold weather approaches, we still have some garden chores to complete. There are steps we can take now to ensure a beautiful and productive garden for the following spring.

Preparation for winter should start in late summer. Hopefully, we have stopped fertilizing and pruning our perennial plants by mid-August. Tender, young, lush shoots encouraged to grow by late season fertilizer or pruning will not have adequate time to harden off before winter sets in. Die-back or reduced flowering may be the result next spring. Wait until late winter or early spring to give your trees and late blooming shrubs a nice pruning. Spring blooming shrubs are pruned immediately after they bloom. Start fertilizing again when plant growth starts in the spring.

One of the best preparations we can give our plants is adequate watering throughout the entire autumn. Add at least one inch of water per week, unless it rains, to the garden soil around your perennials. Use your index finger to feel the soil. If it is as wet as a full bathtub, it is too much; if it feels like a wrung-out sponge, it is just right; if it feels on the dry side, add more water. Don't forget to water evergreens and even our large deciduous trees. The water bill is actually very minimal compared to the replacement cost of these plants. Late season watering will reduce plant stress and help prevent winter drying of woody plants.

In winter young trees, especially those with thin bark, tend to develop sunscald or frost cracking. Cherry, apple, crabapple, honey locust, linden, maple, mountain ash, and plum are most commonly affected. On warmer winter days the bark tissue may become active. When the temperature suddenly drops, the tissue is injured. Blistering and cracking of bark occurs. It is most common on the south and west side of the trees. Protect these trees by wrapping the trunks with commercial tree wrap from the base up to the first branch, overlapping the strip as you go. Tie off the paper strip at the top and secure it by gently taping it to itself. Do not use wire or rope to keep the strip in place; constriction and damage could result to the bark if we later forget to remove them. Plastic tree guards may also be used. In the spring, remove the strips or guards to prevent insects and disease from finding a summer home. Keeping the wrap or guard on too long and securing the protection too tightly are the two major mistakes when protecting the tree bark. Repeat the protection each fall (up to five or more years) until the tree has developed a thick, protective bark covering.

Circle the young trees loosely with $\frac{1}{4}$ inch hardware cloth to prevent gnawing and girdling of the stems by rabbits and voles. Bury the cylinder a couple inches into the ground and make it at least 3 feet high to prevent rabbits reaching the stems in high snowfall. Remove the cylinder after the tree bark matures. Keeping deer out may require a temporary tall fence or monthly use of differing chemical repellants.

Evergreen leaves and needles may die in winter when drying winds or brief warm conditions cause the plants to lose water. The frozen root system cannot replace the loss. The foliage turns brown and dies. In exposed or windy areas, wrapping the plants with burlap material will help prevent this. Even some of our shrubs, such as some hydrangea varieties, benefit when their more cold-tender flower buds are protected. Covering with a wooden A-frame out of plywood will also lessen evaporation and protect shrubs from heavy snow loads. Certain chemical sprays, known as anti-desiccants or anti-transpirants are advertised for preventing winter burn, but studies have shown them to be not very useful.



In our cold Zone 4 climate, mulching our plants in the fall might be the difference between growing or losing plants suitable for warmer Zones. Snow provides a natural mulch and soil cover. However, if we experience another dry winter, our plants will need extra protection. A 6-8 inch layer of mulch around trees and shrubs works wonders for winter protection. Do not place the mulch right up to the trunk; leave at least 6 inches bare around the plants to discourage voles from making a home and damaging the trunks. The mulch that you use should be from organic materials. Rubber, gravel and other stone mulches retain heat and cold longer, they can keep the soil too warm or too cold for plants. Organic mulches will reduce weeding, retain soil moisture, and will moderate soil temperatures. Winter soil temperatures may be 10 degrees warmer than un-mulched soil and summer soil temperatures up to 12 degrees cooler. Wood chip mulch is generally available from our local compost sites. Cocoa bean hulls, straw (weed-free wheat or oats) and pine bark can be purchased locally. Pine needles are ideal. Soon leaves will be falling and soon bags-full will be available for the asking. Whole leaves tend to mat down and then smother the plants. It is recommended that the leaves be chopped first before using as mulch. A lawn mower is ideal for this purpose.

Apply at least 4- 6 inches of mulch to perennial beds after the ground freezes in late November. Mulch will protect the plants and will also prevent new plants from heaving out of the ground as the soil freezes and thaws. Remember to also cover your strawberries with 6 inches of straw after one or two frosts, but before temperatures dip below 20 F and damage next year's fruiting buds. Tender grapes should be removed from their trellises and be well covered with mulch. In the spring, remember to slowly uncover your plants as new growth begins. Recover the plants with mulch if a spring frost threatens.

Ornamental grasses can be left untouched until spring. They will add winter interest to your garden and the grass crowns will be protected. If the plants look too scraggly, the grasses may be cut to a foot or two this fall, and then cut to the ground in the spring before new growth begins.

Pick up and dispose of any fallen fruit to reduce insect and disease problems next spring. The University now recommends that all tomato debris be buried in an out of the way spot to reduce tomato fungal disease next year. Remove dead leaves of plants such as peony, hostas, and phlox to discourage the overwintering of disease and insects. Leave seedy plants such as Rudbeckia, coneflower, and sunflowers to provide winter food for birds. Pot and bring tender plants and bulbs indoors.

Cut down on deicing chemicals like rock salt (sodium chloride) and calcium chloride. An excess of chloride ions from these chemicals are very corrosive, as well as causing plant injury. Use sand if possible.

Now, put up and enjoy those bird feeders. Order seed catalogs. Clean tools. Read garden books and magazines. Write a garden article. Plan your garden for next year, before you plant your garden for next year. Relax.

Happy Gardening,

Joe Baltrukonis

Reference: www.extension.umn.edu/garden