

Winter Plant Protection

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With our warmer than average fall and plants holding onto leaves, I've been asked if trees are at risk of cold temperature injury. Hardy trees are able to withstand cold temperatures by entering dormancy. A concern with a warm fall is if trees will reach dormancy by the time very cold temperatures arrive.

Dormancy in plants is triggered by decreasing day length and temperatures. Both trigger hormonal changes that stop photosynthesis and stored food is moved to twigs, buds, stems and roots. An abscission or corky layer then forms where leaf petioles connect to twigs, causing leaves to drop. Changes within the trunk and branches also protect trees.

Cold temperature injury to hardy plants usually occurs when temperatures make a sudden and severe drop before a plant is dormant. As long as this does not happen, which the forecast is not currently calling for, most trees and shrubs will be fine.

We can't do much about protecting trees from sudden temperatures changes or extremes, but it is time to put protections in place for smaller plants like strawberries and to protect trees from vole damage during winter.

Strawberry plants are best mulched over winter. Mulching protects plants from drying out, conserves soil moisture, and protects plant crowns and flower buds from cold temperatures. Most strawberry cultivars are injured at 15 to 20 degrees F. While the plant may survive, flowering and fruiting is reduced.

Wait to mulch strawberries, and other tender perennials like Chrysanthemums, until after plants are dormant or night temperatures are consistently dropping into the 20s. On strawberries, plant leaves change from bright green to dull green or gray on dormant plants.

Apply a loose mulch four inches deep over strawberries and up to eight inches over tender roses. Wood chips, straw, chopped corn stalks or any loose mulch that will not compact heavily are suitable. Leave mulch on strawberries and other plants until new growth is just beginning in spring, typically about mid-April. This helps delay too early spring growth that can be damaged by late spring freezes.

If you have a perennial plant growing in a container, such as strawberries, a shrub or small tree, the container and plant will need protection. The roots of cold-hardy plants are not as hardy as the above ground parts. Plant roots will be exposed to colder temperatures in an above ground container than they would in an in-ground bed and they can be killed.

Ideally, containers planted with hardy perennial plants should be moved into an unheated garage or shed for winter. If the container cannot be moved, protect plants by wrapping the container with burlap and stuffing it with straw.

In addition to providing insulation around the container, placing a cage of chicken wire around the plant and filling it with coarse leaves provides additional protection. However, even with careful mulching some plant injury can be expected on container plants during severe winters.

During winter, voles tunnel beneath snow and deep mulch to gnaw on trunks which can girdle and kill trees. Some favorite foods of vole's are fruit trees, raspberries, grapes, roses, junipers and dogwoods. The best way to prevent damage is to place a physical barrier around tree trunks.

Using one-fourth inch mesh hardware cloth, place a cylinder around the trunk base. Insert the cylinder a few inches into the soil so voles cannot access the trunk from underneath; and protect the trunk up to two feet high in case of snow. Tightly secure the edges of the cylinder so voles can't sneak in the opening. Rigid plastic barriers can also be used around tree trunks to exclude voles.