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COLD AND SNOW COVER EFFECTS IN THE LANDSCAPE

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With recent extreme cold temperatures, are plants at risk of injury? It depends on the type and health of the plant, the plants hardiness zone, and snow cover.

For small herbaceous perennials, like strawberries and perennial flowers, snow cover is a good insulator. Given the fairly short period of extreme temperatures, small plants covered by snow should be fine. Exposed plants are subject to injury, especially strawberries and perennials hardy to zones 5, 6 or higher.

We know it is warmer beneath the snow as soil temperatures are remaining in the 26 to 30 degree Fahrenheit range.

For plant parts on shrubs, fruit trees and shade trees that are above the snow line, most should be fine if the plant is healthy and hardy to cold hardiness zone 4 or lower.

Zone 5 plants will likely be okay since the cold hit in February when plants were fully dormant, compared to mid to late fall when plants may not be dormant. However, I have seen zone 5 plants killed by extreme temperatures. Some examples are peach, sweet cherry, tulip trees, sweet gum, some Magnolias and some Viburnums.

Plants stressed by drought or disease and insect pests can be more susceptible to cold temperature injury; hence we may see plant kill or dieback on plants we assume will be okay.

For the flowering buds of fruit trees, ornamental trees or shrubs, these could be affected. We had a warm period prior to the cold. If any flower buds swelled, even slightly, during this time, some may be killed by extreme cold temperatures. Only this year's bloom and fruit crop will be affected.

Two issues we see with snow cover is an increase in vole or snow mold injury to lawns and wildlife feeding damage to trees and shrubs.

The greatest economic damage will be to valuable trees. To protect these plants from wildlife feeding, hardware cloth can still be put on tree trunks above the snow line to exclude the animal; or repellants can be applied to plants.

Voles are likely feeding on turfgrass beneath the snow. Voles are small, mouse-like rodents that exist throughout Nebraska. Vole damage appears after snow melts and the feeding runs are noticed in a lawn.

They damage lawns by clipping the grass close to the ground when feeding. Rarely do they damage plant crowns or roots and once spring growth resumes, the damage repairs itself.

Snow Mold is a fungal disease that appears in early spring as snow melts. Pink and gray snow molds can both become active beneath snow cover, but they require a specific set of conditions to develop. Those conditions were not present when our first snowfalls occurred and the likelihood of snow mold developing this year is low.

Snow mold is most likely to develop when snow falls on unfrozen soil. We had cold temperatures for a long enough period of time prior to snow cover that this was not the case this year. If it does develop on some lawns, damage from snow mold disease typically repairs itself once new growth begins on lawns.

With recent extreme cold temperatures, are plants at risk of injury? For small herbaceous perennials, like strawberries and flowers, the snow cover is a great insulator. Given the fairly short period of extreme temperatures, small plants covered by snow should be fine. For plant tissue not covered by snow, like shrubs, fruit trees and shade trees, most should be fine if the plant is hardy to cold hardiness zone 4 or below. Most zone 5 plants will be okay as well, since the cold hit in February when plants were fully dormant; compared to extreme temperatures occurring in late fall when plants may not be fully dormant. For the flowering buds of ornamental trees, shrubs or fruit trees, some could have been affected. We did have a warm period prior to the cold. If any flower buds swelled slightly during that time, some may have been killed by extreme cold temperatures; but only this year's bloom and fruit crop should be affected.

Pruning season is beginning which prompts questions about when to prune evergreens. First, avoid pruning evergreen trees when possible. Plant pine, spruce and fir where they have enough room; then let them grow naturally without pruning. The only pruning that may be needed for landscape evergreens is the removal of a double leader on young trees to avoid structural issues as the tree grows larger. For ever-green shrubs like Juniper, Yew and Arborvitae, where size may need to be controlled, these can be pruned most anytime except in very cold weather. Late winter just before new growth begins is the best time. When pruning any evergreen, do not prune beyond where there are green needles on the branch. Evergreens will not replace growth like deciduous plants will. Once an evergreen is pruned back to bare wood, this is permanent damage and no new growth will occur to cover up the bare area.

With our snow cover, voles could be munching on turfgrass beneath the snow. Fortunately, the damage voles do to lawns is superficial and vole munched lawns repair themselves during spring growth. Vole damage to lawns typically appears after snow melts and the voles feeding "runs" are noticed in a lawn. Voles are small, mouse-like rodents that exist throughout Nebraska. Their short, one inch long tails, stocky build and small eyes distinguish them from true mice. They damage lawns by clipping the grass close to the ground when feeding. Rarely do they damage plant crowns or roots and once spring growth resumes, the damage repairs itself. Controlling voles to prevent turfgrass damage is not needed. However, valuable landscape trees and shrubs should be protected in the fall with a ring of hardware cloth to exclude voles from gnawing and girdling tree trunks and shrub stems.

If you have poison ivy and think removing the plant at this time of the year will keep you safe from a rash, this is not true. When dealing with poison ivy, care must be taken during winter as well as during the growing season. All parts of poison ivy, including stems and roots, contain and secrete the oil urushiol. Contact with this oil is what causes a rash. The oil is found in sap which is present in the vining stems and roots during winter, and in dead and dried ivy plants. Very important to know is poison ivy should never be burned. Burning any part of poison ivy after it has been cut or grubbed out and dried, even if no leaves are present, can be hazardous. Oil in the smoke can cause a skin rash. Inhaling smoke from burning poison ivy can result in serious consequences. If cutting or digging poison ivy, protect yourself even during winter, and know the oil is very persistent on clothing or tools it contacts.

With our snow cover this year, I've been asked about the possibility of the disease snow mold developing beneath snow and damaging lawns. My answer is this is not likely to happen; and even if it did, damage from snow mold disease typically repairs itself once new growth begins on lawns. Snow Mold is a fungal disease that can appear in early spring as snow melts. The diseases pink and gray snow molds can both become active beneath snow cover, but they require a specific set of conditions to develop. Those conditions were not present when snow fell and the likelihood of snow mold development this year is very low. Snow mold is most likely to develop when snow falls on unfrozen soil. We had cold enough temperatures prior to snow cover that this was not the case this year. While we have snow cover this year, we are not concerned about snow mold disease and no form of control will be recommended.