Pros and Cons of Snow Cover for Plants By: Kelly Feehan, Extension Educator Release: Week of January 22, 2024

Everyone may not like the deep snow mother nature dumped on us, but our plants might. There are pros and cons of snow cover for landscape plants.

Snow cover protects plants from winter dessication. If plant tissues are not exposed to winter sun and drying winds, they lose less moisture during winter. Since plants cannot replace lost moisture from frozen soil, open winters with little snow cover increases winter dessication injury.

Snow is a great insulator; especially from cold temperatures we've experienced. While natural dormancy is the best protection, and by this time of year plants were fully dormant, snow cover adds a protective layer. This is most beneficial for plants on the borderline of hardiness or those stressed from drought or other conditions.

When selecting landscape plants, winter hardiness is an important consideration. The USDA plant hardiness zone map is a resource gardener's use to select hardy plants. A new USDA hardiness zone map was recently released as an update to the 2012 map.

On the new map, most of Northeast Nebraska counties are in zones 5a and 5b. Plants hardy to these zones tolerate temperatures as low as minus 15 to minus 20 degrees Fahrenheit in zone 5a, and minus 10 to minus 15 degrees in zone 5b.

At one time, much of northern Nebraska was zone 4. As hardiness zones change, we can experiment with more plants. However, temperature extremes like we are now experiencing are becoming more common so avoid going overboard on planting what previously had not been hardy.

Herbaceous perennials would be fun to experiment with since they are less expensive and don't take as long to reach full size as trees and shrub; but use caution when selecting more expensive trees and shrubs. A plant's hardiness zone is often listed on the plant tag or in garden catalogs and websites.

With our current drought, the snow will provide some much-needed moisture. Most people know it takes a lot of show to equal one inch of rain. As a general rule, 12 to 14 inches of light, fluffy snow is needed to make one inch and 10 to 12 inches of heavy, wet snow.

A negative of heavy snow is broken branches from the weight of snow combined with wind. This is especially true of evergreens as they catch and hold more snow. As snow builds up on branches, gently remove it by lifting up on branches from below with a broom so snow falls off. Avoid hitting branches to remove snow.

If, after snow melts, branches appear not to be returning to a normal position, give them time and they usually will; unless the branch is broken. It will then need to be removed. If only the broken portion is removed for safety purposes, be sure to return in late winter or early spring and remove any branch stubs that may remain. Branch stubs can prevent a tree from sealing a wound, leading to decay in the branch stub that can enter the main trunk.

Deer and other wildlife may turn to windbreak and landscape plants when other food sources are covered by snow. Damage may be reduced with applications of repellants that make plants smell or taste bad. These need to be applied directly on the plant or nearby and according to label direction. They may work for a short time and reapplication is needed.

Snow cover also increases the chance of voles nibbling on grass beneath the snow. When snow melts, feeding trails may be seen in the turf. This is not a concern as lawns recover as soon as new growth begins in spring. Voles feeding on trees beneath snow is more of a concern. There is not much that can be done now to prevent this. Wrapping young trees with hardware cloth before snowfall is needed.