

**“I’m dreaming of a  
white Christmas,  
Just like the ones I  
used to know.  
Where the  
treetops glisten,  
And children listen  
To hear sleigh bells  
in the snow”**

# Dreaming of a White Christmas

But fewer than half of Americans are likely to experience snow on Christmas.

by Carol Barany for Yakima Valley Master Gardeners

**B**ing Crosby grew up in Spokane, and when he sang about white Christmases, he knew what he was singing about. But according to data from the National Oceanic and Atmospheric Administration, most of the United States has less than a 50% chance of seeing snow at Christmas in any given year. In many areas, the likelihood is virtually zero.

Seattle’s Brenda White was facing the facts of December weather in western Washington when she penned the carol ‘Christmas in the Northwest’, with lyrics that include, “It may not be white, might be a rainy night”.

Sorry, but that’s not weather I want for Christmas.

I’m with Bing. If you dream of a white Christmas, maybe the wish will come true. After all, I grew up in Buffalo, New York. Sure, scoffers complain that all that white stuff snarled traffic across the mountain passes last week and caused fender bender mayhem. But snow is a gift to our valley, where the water

supply is often uncertain. And snow provides benefits far beyond the water it brings.

It would take a Grinch to deny that a blanket of white transforms a barren winter landscape into a masterpiece of stunning beauty. Snow hides all my mistakes and transforms the ordinary in my garden into something extraordinary. Trees and shrubs with ornamental bark, like red twig dogwood or paper bark maple, are even more brilliant against the snow.

The faded perennials I left standing are frosted with shimmering diamonds. And all the leaves I never finished simply disappear, at least until the snow melts.

On the practical side, a blanket of snow provides important insulation for the soil, like the down comforter on your bed. Snowflakes are distinctively designed to include small, air-filled spaces of low heat conductivity. As they pile up, it becomes harder for frigid air temperatures to penetrate into the soil where roots could be damaged.

Ten inches of fresh snow that's seven percent water is approximately equal to a six-inch-layer of fiberglass insulation with an R-value of R-18. In snowless Yakima winters, frigid temperatures can freeze the soil deeper and deeper, making it more likely that vulnerable perennials and shrubs will suffer damage.

The insulating effect of snow also protects perennials, bulbs, and ground covers from alternating freezing and thawing cycles. Without snow, a spell of milder temperatures and bright sunshine could warm the soil surface, causing frost heave. An increasing volume of ice expands towards the surface from the depth in the soil where freezing temperatures have penetrated, and newly planted perennials and bulbs can actually be heaved out of the soil.

In snowless winters, frost problems can be magnified where plants face the morning sun. In those conditions, they can thaw too quickly, rupturing their cell walls and causing damage or death. Snow

cover moderates these problems and can also protect small conifers and broad-leaf evergreens from desiccating winter winds.

Snow helps conserve soil moisture. Soil temperatures drop more slowly in moist soil than dry due to the heat of fusion generated by the freezing of soil water. During cold spells, roots are kept warmer than air temperatures under their snowy blanket.

If it snows before the ground freezes too hard, it's easier to dig root crops such as carrots and parsnips. If the snow keeps the soil from freezing, roots will continue to grow and earthworms and bacteria in the soil continue to turn garden debris into beneficial compost.

Of course there are hazards to the garden from too much snow. A heavy accumulation can bend, break or split branches, and plants can become uprooted. Shaking excess snow out of trees, shrubs and hedges, particularly evergreens, can help prevent them from collapsing under the weight. It makes sense to remove heavy snow from the roofs of greenhouses and cold frames to not only let in light but to prevent the structures from bending under the weight.

Another negative is that small animals now have some protection from predators and have more freedom to gnaw on your ornamentals. Rabbits, voles, and mice are more likely to feed on tender bark when the ground is snow-covered.

There will be plenty of time to worry about that later.

Outside, the moon is rising over a snowless ridge in the east, but the dusting of white on the foothills in the west holds the promise of more to come. Have yourselves a merry little Christmas, whether it's white or not. May your gardens sleep in heavenly peace.

