

2009 12 09 Alamosa Trees

by Marilyn Loser

How trees survive winter and how you can help: Part 2

Part 1 of this article began the discussion of how Alamosa trees cope with winter. This installment continues with deciduous trees and moves on to evergreens.

If buds open before winter is over, new leaves will be damaged and the tree will have trouble making food in the spring. Some species require a cold period before the buds can open. Apple trees need to be kept below 35 degrees Fahrenheit for 6 to 8 weeks before their buds will open. Birches will only open their buds after daylight hours exceed a specific threshold.

Alamosa weather often includes a very warm period in February. For the last several years my forsythia plant, located in a protected location, started to break dormancy in February. The flower buds began to open, sap started flowing, then the plant was zapped by a cold spell. I had no beautiful yellow flowers. One year most of the branches died back to the ground.

I had a beautiful bur oak tree in an exposed part of the garden. It wintered fine the first year, but this past summer it didn't leaf out. A bur oak in Jardin Hermosa, across from my house, suffered the same fate. The city removed the park tree while I pondered what to do. I procrastinated long enough for it to produce new shoots from the ground. I cut off the top, dead branches. The oak produced beautiful, large leaves that reddened nicely this fall. I now have a bush with a handle. My guess is that our variable winter weather killed the top of the tree (perhaps in the warm weeks of very early spring), but that the roots were protected and hardy enough for the oak to survive.

Young leaves that bud out in early May might be in jeopardy. I have a small Amur maacki that puts on leaves earlier than any other tree in my yard. The last two years the leaves froze and dropped, but were eventually replaced. I feel that cold stress has kept this tree from thriving.

Evergreens, those trees that don't drop their leaves in winter, face some different problems. They lose water through transpiration. Since the ground is frozen or dry, evergreens can't replenish this lost water. Holly, which I've never seen survive an Alamosa winter, has leaves that are covered in a thick layer of wax that retards water loss. Conifers, such as pine trees, have long narrow needles, a shape that helps reduce water loss.

Some people swear by anti-transpirant sprays used to coat evergreens with a wax-like substance and reduce water loss. The University of Minnesota Extension web site states, "Most studies, however, have shown them to be ineffective." I've never tried them and would love to hear from folks who have.

I lost one evergreen and had several others severely damaged the early spring of 2008. We were gone when a dry fall and early winter was followed by a heavy snow early in the new year. The snow was followed by sunny, warm days. The trees lost a lot of water from the warmth and from snow-reflected sunlight. Whether the ground was dry or just frozen, they couldn't absorb replacement water. Our friend, who looked after our house, learned from the Extension Agent that spreading straw around trees would reduce reflection and water loss. His valiant effort

spreading straw saved my suffering trees. One of the nasty twists of such situations is that the damage doesn't appear until it's too late. Many needles browned and dropped and we lost entire limbs, but this didn't happen until months after the desiccation.

The Minnesota Extension site suggests protecting evergreens from winter sun and wind burn with burlap screens placed near, but not touching trees. For our environment, you'd want to protect them from southwestern exposure. When I planted my first Colorado blue spruce about 12 years ago, a friend suggested covering it to prevent winter damage. I dutifully packed some straw around it and covered it with a blanket secured with twine. NOT a good idea. I believe I cut off too much air flow and light and didn't allow enough transpiration. The tree lives, but has never thrived.

Those of you who have stayed with me throughout the two parts of this column may be wondering why on Earth I'm writing an Alamosa Trees column when I've made so many mistakes. I'm hoping I've lived and learned! I don't have a green thumb, but I have a persistent one. The next column will discuss information sources about trees and the impact of deer on trees.

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"I like trees because they seem more resigned to the way they have to live than other things do."
Willa Cather