2010 Aug 18 Alamosa Trees
by Marilyn Loser

Alamosa's Unique Environment

As I drove across Kansas on Highway 50 from Colorado to Kansas City, I oohed and ahhed at the magnificent trees and green, high plains. Yes, they have cottonwoods and elms as evidenced by names like Cottonwood Creek and Elmdale, but there are lots of magnificent harder wood trees as well, especially in Eastern Kansas. The harder wood trees I'm referring to include oaks and many maples that are slower to grow, live longer, and tend to be stronger than species such as cottonwoods and willow. Alamosa doesn't have many of these species right now, but there's a good chance some would do well here.

Why do the high plains have more harder wood trees? Much of the area I traveled through was originally plains with very few trees; those trees were mostly cottonwoods along streams. In fact, the Kansas State Tree is the Eastern Cottonwood, populus deltoides. Before settlers began planting trees in the 1880's, much of the state (especially towards the west) was high plains grass. Settlers wanted more than sod huts and wind swept lands and needed firewood. The planted harder wood seeds and seedlings.

We hear of severe ice storms, tornados, and high winds in Kansas – not exactly ideal conditions. What elements make our environment so challenging compared to that of Kansas?

The most obvious is WATER. Our annual precipitation is 6-8" and Kansas ranges from 15" in the west to 60" in the southeast. Many streams cross the state providing excellent tree habitat. Harder wood trees in our area need to be irrigated, and not just for the first few years. I believe they will do best in irrigated lawns as long as the grass is keep several feet from the trunk in establishing years.

TEMPERATURE EXTREMES is another element. Our growing season ranges from mid-June to mid-August while Kansas has an extra two months (mid-April to mid-September). We also experience daily extremes which often vary by 25 - 40 degrees (F) in a day. The prediction for this Friday is a low of 45 degrees and a high of 85 degrees. Average October high is 62 degrees and the low 24 degrees. The average high for December 9 is 35 degrees and the normal low -1 degrees, but the record low was -42 degrees.

Kansas City typically experiences a daily 20 degree range with August averaging a low of 66 degrees and a high of 87 degrees: December average lows and highs are 22 degrees and 40 degrees, respectively.

Alamosa's wide temperature fluctuations can play havoc with trees. If trees and shrubs experience warm highs in February, buds may try to bloom and then be frozen – I

frequently experience this with my forsythia shrub. While the shrub remains healthy, I miss the beautiful yellow, spring blossoms.

This summer, I returned from a trip in mid June to find a tree I planted a couple of years ago displaying browned and shriveled tiny leaves -- I think Alamosa experienced a hard freeze. While the branches were still flexible, the tree only put on new growth from the ground and I now have a shrub with a handle. Seems enough damage was done to kill the entire trunk/branching structure. I'm not a happy camper.

I thought WIND might be another element in which we differ from Kansas. However, high winds are known in both areas. I was impressed by the many modern wind mills across the plains.

We're definitely higher than Kansas so ELEVATION might be another element. Alamosa is about 7500 ft. above sea level and the Kansas high plains are around 4000 ft. near the Colorado border. However, more trees are seen as you travel east and the elevation dips from around 2000 ft. in mid state to 700 ft. in the east. Water and nutrients flow up trees more easily at lower elevation.

96 percent of Kansas' woodlands are privately owned. 47% of the forests are mixtures of elm/ash/cottonwood/locust. Another 45 percent is oak/hickory. Trees native to Kansas include Red Hawthorn, Bur oak, hackberry, linden, willow, cottonwood and maple. Siberian elms (the elms that abundantly reseed in Alamosa) have been introduced.

Indeed, we have a unique environment. However, there are a variety of non-invasive species that might do well here. Harder wood trees you might consider are Autumn Blaze maple and Bur oak – especially if planted in protected areas. Two Autumn Blaze maples were planted in city parks during Arbor Week this spring and two Bur oaks a year or so ago and are doing well. We'll be planting more Autumn Blaze maples and Bur oaks in Cole Park within the next month or so. I'm very excited about Hackberrys as I've had one for several years in my yard on the cold, wind-blown western edge of Alamosa and its doing well. Visit the Alamosa Tree Board recommended list at www.AlamosaTrees.net for recommended species.

"Trees are Earth's endless effort to speak to the listening heaven." Rabindranath Tagore