



Alamosa Landscapes

Why Tree Species Diversity?

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2019 May 29

The City of Alamosa is planting nine species of trees in conjunction with Arbor Week this year. At one of the recent community plantings someone asked me, “Why so many species?” It turns out that diversity is very important to the creation and maintenance of a healthy urban forest.

The inquirer was a younger person and I expected they hadn’t heard about the devastation of desirable elms (*Ulmus*) across America last century by the Dutch elm disease. “Of the estimated 77 million elms in North America in 1930, over 75% had been lost by 1989,” according to the Wikipedia.org website. The largest surviving urban forest of elm trees in North America is believed to be in Winnipeg, Manitoba, Canada. “About 200,000 elms remain and the city spends \$3 million annually to combat the disease.” Yes, we have the weedy Siberian elm (*Ulmus pumila*) in Alamosa that regular readers of this column know I don’t care for as it produces lots of seeds that usually develop into weedy looking trees.

Before the devastation, many cities and towns had elms lining both sides of their streets. Apparently, many people and residential home developers preferred the look of rows of identical trees. Of course, it’s easier to plant one after another of the same thing.

The downside is that once one tree becomes infested with a pest, neighboring trees of the same species are likely to become infected. And many pests are species dependent. For example, the emerald ash borer was first identified in America in 2002, but it doesn’t affect other tree species. “It has killed at least tens of millions of ash (*Fraxinus*) trees so far and threatens to kill most of the 8.7 billion ash trees throughout North America,” reports Valenta et al. in the Journal of Applied Entomology.

Another reason to plant a diversity of trees species is that different trees grow and age at different rates. If you plant a variety, you can replace a small portion of the trees when needed, not the entire park or street. In 2010 Alamosa’s Cole Park had 75 Siberians elms, 64 cottonwoods, and 21 willows. Most were planted in 1937 and, unfortunately, are coming to the end of their life spans. The city has been planting a variety of new trees in the park since then.

So what trees do well in Alamosa? Deciduous trees the city is planting this year include “Autumn Blaze” maples (*Acer x freemanii*) that have become popular in recent years. Most striking is their bright red foliage in the fall. They do prefer moist, well-drained soil but will tolerate some drought and wind. We’re seeing a number of newly developed elm species that are Dutch elm disease resistant such as Accolade Elm (*Ulmus ‘Morton’ Accolade*). Honeylocust such as Skyline (*Gleditsia tricanthos inermis* “Skyline”) do well and provide filtered shade. Once established, they tolerate drought and do well in a variety of soil types.

Since Alamosa means “grove of cottonwoods”, it’s not surprising that cottonwoods are still popular. I recommend lanceleaf cottonwood (*Populus acuminata*) over the narrow-leaf variety as it doesn’t sucker as much. Wish I’d known this 10 years ago! They thrive at our elevation of 7600 feet, but do need regular water. Originally, they grew along the Rio Grande in our city.

I’m a fan of western hackberry (*Celtis occidentalis*) with one reservation. They leaf out later than other trees in town. In this last week of May, downtown specimens are just beginning to leaf out. They tend to be fast growing (by Alamosa standards) and adapt to dry environments.

To thrive in Alamosa, all trees need supplemental water. Our yearly average precipitation of less than eight inches of moisture just isn’t enough! For more information regarding trees in Alamosa visit AlamosaTrees.net. You can also download a Tree Maintenance brochure.

Many of the trees the city is planting this year were funded by grants from the Xcel Foundation and the Colorado Tree Coalition.

“Teach the legal rights of trees, the nobility of the hills; respect the beauty of singularity, the value of solitude...” Josephine W. Johnson (Quote submitted by Jan Oen)