

## People Want Trees That Grow Fast, Are Pretty, And Grow Anywhere

## by Marilyn Loser

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I had the good fortune to hear Dr. John Ball speak on "The Case for Tree Diversity" at the Trees, People and Towns Conference hosted by the Arbor Day Foundation in Nebraska City, Nebraska recently. As many know, Nebraska City is on the Missouri River in eastern Nebraska south of Omaha. Nebraska was not even a territory when J. Sterling Morton staked a claim in the City and went on to found Arbor Day.

For any trivia buffs out there, his son founded the Morton Salt Company. As a child, I loved their jingle "When it rains, it pours."

Before getting to his main topic, Ball talked about the terrible practice of topping trees that still goes on today (Topping is the indiscriminate cutting of tree branches to stubs or to lateral branches not large enough to sustain the remaining branch according to treesaregood.com). He bemoaned the fact that we've known this is bad for a long time. Apparently, the first mention of the practice was in the 1618 publication of "New Orchard & Gardens". "A tree which has lost its head will never recover it again," said George Curtis in 1664. "He who tops a tree should forfeit his hand."

Ball has managed tree care companies throughout the Midwest and East and is currently South Dakota State University Professor of Forestry and Extension Forestry Specialist. He made several points. 1) People want trees that grow fast, are pretty, and can grow anywhere. Pick two, you can't have all three. 2) Don't plant more threes than you can care for. Generally, this means no more than you can adequately water.

- 3) Newly planted trees need a little bit of water every day. He suggests using bags such as Ooze Tubes, plastic doughnut looking devices that you install around trees and fill with water that is meted out over a week or two. I checked the web and they are readily available for less than \$20 each.
- 4) Trees do better in a forest or planted in a group. For example, if you want tall trees, planting a group of trees near each other encourages the trees to complete with each other to reach for the light. Also, the close plantings promote some mutual protection as wind doesn't damage the group as much as if the trees were individually planted out in the open (I hadn't heard about this before).
- 5) We need more genera and the right ones. Frank Santamour of the US National Arboretum is known for saying the following in 1990: "Urban foresters and municipal arborists should use the following guidelines for tree diversity within their areas of jurisdiction: (1) plant no more than 10% of any species, (2) no more than 20% of any genus, and (3) no more than 30% of any family." Ball said he asked Santamour about this and Santamour replied he just made up the percentages!

Ball suggests planting no more than five % from any one genus. But really, I say we need some research. He says he looks at it from a management perspective and cautions planting too many trees from genera with a large number of species. He noted that pests tend to attack a genus, not just a particular species in a genus, when trees are imported. He further elaborated that a genus with few species tends to have fewer pests and therefore tend to be healthier and more maintenance free. For example, trees in the genus Maackia have two species and one known pest. On the other hand, trees in the genus Tilia (generally called linden or basswood in America) have 22 species and 31 pests.

He also says to be cautious of importing too many trees that grow on all three temperate continents. This many seem illogical, but the point is if a tree species has grown for many years in Asia it has an evolutionary history with local pests and has developed a relationship between pest stresses and resistance. However, if you import that tree to Alamosa, it may not be able to resist the stresses from local pests of similar species. Or, local trees may not be able to resist the stresses from the imported trees. Just think of Dutch elm disease and the more recent Emerald Ash Borer.

In a future column, I'll discuss more about the conference and specifically relate it to what we can try in Alamosa to "Promote a Healthy Community Forest".

"Each generation takes the earth as trustees. We ought to bequeath to posterity as many forests and orchards as we have exhausted and consumed." J. Sterling Morton