

# Re-planting Omaha's Heritage Trees: a Biological Systems Approach

presented by Jack Phillips, Registered Consulting Arborist and acting Curator, Omaha Downtown Arboretum

**Saturday, September 13**  
**Lauritzen Gardens, 100 Bancroft Street**  
**Omaha, Nebraska**



*Young red oak leaves*

Community trees provide countless environmental and social benefits, and the loss of many of our trees in recent storms provides an opportunity to restore the canopy and create a legacy through proper selection, planting, and care.

In the wild, trees grow and survive within natural systems. This class, the second in the "Trees Up Close and Personal" series, will provide the biological and ecological basis for sound tree selection and planting methods through the use of microscopes in the classroom and an outdoor tree walk.

The class will begin with a 9-10:30 am classroom session followed by outdoor tree walk until 11:30.

*Lauritzen Gardens 100 Bancroft St, Omaha. To Register, call Jane Diesen 402.346.4002*

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*From the Green Omaha Coalition Newsletter of Monday, August 25, 2008*

## **Learning from our mistakes, Omaha can protect our trees' future**

The metro area's June windstorm did a number on our trees. The good news: we can improve our community and the environment, not only by realizing where we went wrong with our trees in the past, but how we can do right by our trees in the future.

There are several ways in which we went wrong. According to Jack Phillips, a registered consulting arborist based in Omaha, the heart of the problem is that we don't know how many trees exist – or existed – in Omaha.

"In this area, we don't really have anyone who keeps track of trees," Phillips said. "If you don't know how many you have to begin with, it's difficult to assess the damage. Our losses certainly were in the hundreds, and many more are yet to die."

A project he started prior to the storm is

working to determine the number and type of trees in downtown Omaha with the Downtown Business Improvement District.

Phillips said most of the trees he examined throughout Omaha after the windstorm were not killed by the storm, but had been damaged prior to it. There are many factors that contribute to failed trees, including tree selection, incorrect planting, construction, incorrect care, and prior storm damage.

"We know which species are more storm resistant, he said. "It doesn't make sense to plant trees that are highly susceptible to storms and disease."

Phillips said many trees are planted incorrectly, and the cause is often improper instructions.

"Many things that are written and taught

about planting are simply incorrect," he said. "There are lots of misconceptions about tree planting. What is important is that there's a proper site analysis so the correct species is planted. People often ask me 'What's a good street or shade tree?' It depends on the site. What's a good tree in your yard may not be a good tree in your neighbor's yard."

Construction often is a detriment to healthy trees. Phillips said many people involved in construction believe that if they somehow stay outside the drip-line of a tree, or the horizontal extent of the canopy, the tree will be fine. But that's not the case.

"The root zone of the tree needs to be identified," he said. "The critical root zone is determined by the size, age, species and condition of the tree. Then appropriate measures need to be taken to keep the work, equipment and construction activity out of the area."

Incorrect care can seriously damage trees. Synthetic nitrogen is harmful to trees.

"A tree becomes greener after it's fertilized, but it's often at the expense of the root system," Phillips said. "Automatic irrigation can also be a detriment to trees. First, the installation of sprinkler systems can damage roots. Second, most tree species don't do well with consistently wet soil. It creates soils with low oxygen content. People really are trying to do nice things for trees, not realizing the harm that's done."

Another factor that contributes to the impairment of root production and growth is placing mulch too close to the tree trunk. Landscape fabric, river rock and added soil can do lots of damage to tree roots.

"Planting around the trunk of a tree – adding 'tree tutus' – causes huge problems," Phillips said. "It's like leaving a diaper on a baby too long. It causes diaper rash."

Phillips believes the ice storm of 1997 affected trees more than this summer's wind-storm.

"We're still cleaning up from that storm," he said. "Many trees that fell this time were damaged in '97. I believe that the clean up was worse than the storm. Many trees planted at that time set the community up for failure. Many trees were removed that didn't need to be, and many were pruned that should have been taken down. There was lots of structural decay because trees weren't

pruned correctly or should have been removed. Many replacements were not good urban trees."

The top solution to the metro area's tree dilemma: education by experts.

Residents and businesses can contact the Nebraska Statewide Arboretum. Its experts can make recommendations for planting as well as provide proper planting instructions. They also can contact a registered consulting arborist, such as Phillips, who provides similar assistance. The Nebraska Forest Service also can be contacted. It provides education and services to Nebraskans in all aspects of planting, protection, care and utilization of our forest and tree resources.

The ReTree Nebraska program is an additional educational resource. Its primary goal is to work in partnership with people across Nebraska to foster the proper planting and maintenance of one million new trees by 2017.

Financial resources are available to neighborhood associations for tree replanting, including a grant from the Omaha Public Power District for up to \$2,500. The Nebraska Forest Service and Nebraska Statewide Arboretum are also giving grants to communities.

Phillips would like to remind people of the significance of trees to the community.

"Trees change the character of a community," he said. "The social value of trees is left out of the conversation. It's pretty easy to talk about the environmental benefits of trees, but trees really make the character of a neighborhood more than we realize. I think there's a great psychological, social and spiritual impact when we have storm events. That's all the more reason why we ought to really pay attention to how we plant and care for our trees."

Phillips also will lead a walking tour of the Gifford Park neighborhood during the Green Home Tour, held on September 6.

Tree education resources:

- \* Nebraska Statewide Arboretum, <http://arboretum.unl.edu/>

- \* Jack Phillips, registered consulting arborist, [consultingarborist.org](http://consultingarborist.org)

- \* Nebraska Forest Service, <http://www.nfs.unl.edu/>

- \* ReTree Nebraska, <http://www.nfs.unl.edu/retreenebraska.asp>