

## **TIME TO REMEMBER THE BENEFITS OF HEALTHY TREES**

By Liz Stewart, River Edge Shade Tree Commission

It is no surprise that trees have been getting a bad rap lately. During the past two years, we have seen unprecedented storms with high winds, causing unpredictable tree damage. People are concerned and as a result they are having healthy, mature trees removed in record numbers.

While removing hazardous trees is important, it is also essential to realize the benefits provided by healthy trees. Before deciding to remove a tree, it is important to be mindful and become educated in the benefits a healthy tree can provide.

Studies have shown that trees are an essential part of our urban life. Most people realize by now that trees offer a wealth of benefits. Their shade provides a cooling effect and energy savings. They help with air, soil and noise pollution. They create a calming effect, provide food such as nuts and fruit, and provide wildlife habitat. Trees are associated with childhood memories, are planted during celebrations and are used as memorials. It is time to take more notice of why we need trees.

With more construction being done in many towns, there is an increase in impervious surfaces (driveways, roof cover, streets, and sidewalks). When it rains, the water is unable to be absorbed into the ground and it winds up in the sewer, increasing flooding. The little soil that is exposed has a higher incidence of runoff, carrying the upper layer of sediment with it, creating impaction and causing more flooding in the future. Basically, the water has nowhere to go and we see it seeping into our basements.

This is where trees can help. Tree canopies have actually proven to help with storm-water runoff and protect from strong winds providing a buffer to storm damage. Trees growing adjacent to each other provide a cumulative effect and protect each other and surround structures from damaging strong winds. A healthy mature tree can prevent up to 40 percent of rain from reaching the ground during an average rain period. On top of that, the roots can absorb up to 400 gallons of water an hour, filtering pollutants as it does so. This means less runoff leading to less flooding and clean air and soil.

If you are considering removing a tree on your property, please consult with a Certified Arborist or NJ CTE (Certified Tree Expert). These professionals are trained to properly assess the condition of a tree and can help you make an informed decision. Removing a healthy tree should not be taken lightly since it impacts your entire neighborhood.

Residents should be encouraged to support a tree-planting maintenance and replacement program in their communities and everyone can take the first step to help by planting trees on their own property. Make sure you plan ahead and plant the right tree in the right spot. Although a single homeowner can surely benefit from having one tree in their yard, a far greater benefit is gained for the community with a combined effect of maintaining a healthy urban forest canopy.

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## **REDUCE THOSE WINTER HEATING BILLS**

Everyone knows that summer temperatures are cooler in the shade, but trees can help cut winter energy costs, too. The most common approach is to plant evergreen trees and shrubs on the north and northwest sides of your property.

“Wind barriers can channel winds away from your house and cut down on cold drafts getting into your house,” says Tchukki Andersen, staff arborist with the Tree Care Industry Association. “In addition, shrubs, bushes and vines planted next to a house can help insulate the home in winter and summer.”

The ultimate goal of planting a windbreak or living snow fence is weather control. By creating a design that takes into account wind speed and direction, snow accumulation patterns and areas of high and low usage, spring and summer planting can offer homeowners benefits ranging from reduced energy costs to more efficient water management.

“To reduce winter heating costs, plant evergreen trees and shrubs as windbreaks,” Andersen recommends. “Most cold winds come from the north or west, so on those sides of the building plant a dense row of evergreens that maintain branches low to the ground. To provide additional insulation for your building, evergreen shrubs should be planted slightly away from the foundation.

Whether your goal is to reduce the chilling effects of winter winds or control the accumulation of snow, the density of the plantings is key. A rough estimate of density can be determined by estimating the ratio of the “solid” area (branches, trunks, leaves, etc.) to the total area of the barrier. For example, a row of deciduous trees might offer a density of roughly 30 percent, which means that the row consists of 30 percent trees and 70 percent open space in winter. By comparison, a row of conifers might have a density of 50 percent or 60 percent in winter.

Higher density windbreaks are better at slowing wind speed enough to cause snow to drop to the ground and accumulate both on the windward and leeward side of the row (or rows). These types of living snow fences are extremely useful for keeping roads, driveways and other high-use areas clear of drifts, which means less plowing, less shoveling and less aggravation.

On the other hand, trees should not be planted on the southern sides of homes in cold climates because the branches of these trees will block some winter sun. Open drapes on the south side of your home during winter days and close them at night. Sun angles are low in winter, allowing substantial solar heating through all south windows. You may want to trim branches on this side of your house to allow sunlight in. Call a professional arborist to trim any vegetation that shades south windows.

Remember, every location is different and there is no perfect design that will be effective in all situations. A professional arborist can conduct the proper research and planning to plant an effective windbreak that will offer homeowners a variety of benefits for years to come.

*This information brought to you by The Tree Care Industry Association  
and the NJ Board of Tree Experts.*