Benefits of Urban Trees

Urban and Community Forestry:

Improving Our Quality of Life

"I think that I shall never see a poem lovely as a tree"

These words by ***American poet Joyce Kilmer*** capture the love most people share for trees. This sentiment may be especially appropriate in urban areas where trees are particularly noticeable and play critical roles in the quality of life. Trees are also major capital assets in our cities and towns-as much an integral part of the scene as streets, sidewalks, and buildings- they represent a major component of the "**green infrastructure**."

What Trees Do

Trees are not only beautiful in themselves but add beauty to their surroundings. Trees add color to the urban scene, soften the harsh lines of buildings, screen unsightly views, and provide privacy and security, while contributing to the general character and sense of place in the communities.

Trees Improve Air Quality

Air pollution is the bane of most cities and many towns. At its worst, it can be seen and smelled and even felt. Since the emission of many air pollutants increases with higher temperatures, trees can improve air quality by lowering air temperatures. Trees further their cleansing work by absorbing pollutants into their leaves and trapping and filtering through their leaves, stems, and twigs.

Trees Reduce Stormwater Runoff, Erosion and Clean Water

Trees influence the flow of water in several ways. Their leafy canopy catches precipitation before it reaches the ground, allowing some of it to gently drip and rest to evaporate. This interception lessons the force of storms and reduces runoff and runoff. Research indicates that 100 mature trees intercept about 100,000 gallons of rainfall per year in

their crowns, reducing runoff and providing cleaner water.

Trees Temper Local Climate

Trees modify local climate chiefly by lowering air temperature and increasing humidity; they can also influence wind speed and reduce glare. Inner cities are commonly known as "**heat islands**" because the buildings and pavement absorb energy and radiate it back. Trees lining streets or near buildings provide shade that can reduce the heat island effect, lessening the amount of air conditioning needed. Evaporation of water from trees though the transpiration process also has a cooling effect, especially in hot climate or seasons.

Trees Conserve Energy

In addition to reducing the heat island effect, community trees can conserve energy with their shading and evapotranspiration effect. For example, three or more large trees strategically placed on sunny sides of a house shade it from the hot summer sun, thus reducing the air-conditioning cost as much as 30 percent. Deciduous trees are best for this use because they lose their leaves in winter, exposing the house to the warning winter sun, which lowers the energy needed to heat the house. Coniferous trees, because they retain their needles year-round, make fine screens and serve well as windbreaks when placed in the path of the prevailing winds, usually the north and northwest sides. These trees can also reduce energy use in a house by shielding it from the most severe cold.

These energy savings, spread over many houses and many neighborhoods, can reduce the demand for power production by utility plants, which in turn reduce the air pollutants produced by these plants.

Trees are Good for the Economy

Community trees provide subtle but real economic benefits. The value of houses on lots with trees is usually higher than those of comparable houses on lots without trees. Studies have shown that shoppers linger longer along a shaded avenue than on one barren of trees. Shaded thoroughfares are not only more physically comfortable but also psychologically more attractive. And an abundance of trees "says something" about a community that makes it more appealing to newcomers as well as residents. In addition to enhancing the home and business environment in an urban area, recreation areas such as parks, greenways, and river corridors that are well stocked with trees tend to keep recreation seekers "at home" rather than diving many miles to find suitable places to play.

Trees Create Habitat for Plants and Animals

Wherever trees are established, wildlife and other plants are sure to follow. Trees and associated plants provide shelter and food for a variety of birds and small animals. The presence of trees creates an environment that allows the growth of plants that otherwise would not be there, enhancing the diversity.

Trees Improve Health

The health benefits of cleaner air and water are self-evident. But it also known that green environments reduce stress in people, making them more productive at work and happier at home. Trees and their associated vegetation have a relaxing effect on humans, giving them a general feeling of calmness and well-being. Among those who benefit from the proximity of trees are hospital patients. Studies show that patients with a window view of greenery recover faster and suffer fewer complications and medications than those without such views.

Trees Serve as Screens

Densely planted rows of trees around homes and buildings and along streets and roads can serve as screens to preserve privacy and shut out unwanted or unsightly views. Wide belts of such plantings can also help to muffle sound.

Trees Promote Community

A stronger sense of community, an empowerment of inner-city residents to improve neighborhood conditions, and the promotion of environmental responsibility and ethics can be attributed to involvement in urban forestry efforts. Active involvement in tree-planting programs enhances a community's sense of social identity, self-esteem, and ownership; it teaches residents that they can work together to choose and control the condition of their environment. Conversely, a loss of trees within a community can have significant psychological effect on residents.

What You Can Do As Community Leaders

Cities and towns make harsh environments for trees, so we must give them special care and protection. Establishing and maintaining community trees and forests can be challenging and costly, but the benefits described here are well worth the time, trouble, and money spent. Trees in urban settings often need to be protected, planted (or transplanted), and tended. This is both an individual and community responsibility.

"Never doubt that a small group of citizens can change the world. Indeed it is the only thing that ever has."

- Margaret Mead

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