



Grass Makes Cities Greener

They're often called concrete jungles and perceived as dirty gray grids of buildings. But in America's urban areas, city planners, leaders and residents are discovering that green spaces – from grassy parks and other expanses to small lawns and green roofs – improve their quality of life *and* the environment.

Grasses in cities provide many more benefits than a spark of color surrounded by stone and cement. They stifle noise, trap dust and debris, lower air temperatures in the summer and decrease rain runoff. Consider what studies have found, specifically:

- Summertime air temperatures above lawns can be up to 30 degrees cooler than above paved areas because when water in the grass' soil evaporates it cools the air around it, which helps reduce energy use and pollution by serving as nature's air conditioner.
- Because of grass' cooling nature, green areas in cities significantly reduce the urban heat island effect, which is caused by urban development and waste heat generated by energy usage.
- Grass acts as an air filter, trapping dirt, smoke and other air pollutants, improving air quality and minimizing the negative health impact from smog and heat waves.
- It's actually quieter in a city with more grass because it reduces noise levels by 20-30 percent.
- Green, grassy areas tend to make urban areas more livable. Studies have linked green spaces with reduced crime, and decreasing stress and aggressive behavior. Grass also provides a habitat for birds, insects and other creatures.

Green Roof as Good as a Green Lawn

The benefits of green lawns apply to green roofs, which are growing in number in American cities – from municipal buildings to corporate headquarters. Green roofs are partially or completely covered with grasses and other vegetation, and help curb air pollution by absorbing dust and pollutants, decrease energy expenses by cooling surrounding air temperatures and reduce storm runoff by absorbing rainwater.

Officials of the City of Chicago, a leader in the green roof initiative, believe that if all Chicago roofs were green roofs, peak energy demand could be trimmed by enough electricity to supply 750,000 consumers – about one-fourth of the city's more than 2.8 million residents. Similarly, the load on the city's storm sewer system could be slashed by roughly 70 percent because grass and soil better absorb water that would otherwise run off the pavement.

A green oasis in a sea of gray is like a breath of fresh air. Lawns in cities and urban neighborhoods provide residents with more than a lasting connection to nature – these green spaces also improve living conditions in urban environments and create welcoming communities.

Source:

James B. Beard, Texas A&M University, The Role of Turfgrasses in Environmental Protection and Their Benefits to Humans, 1993
Green Roofs Popping Up in Big Cities, Bryn Nelson, msnbc.com, April 15, 2008

Developed by
**Rich Shank, Chief
Environmental Officer,
The Scotts Miracle-Gro
Company**