

Benefits of Trees and Forests in Communities

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Ecological Benefits

- Trees help purify the air by filtering dust and pollutants. Dense plantings in a city can reduce the dust count by 75 percent downwind of the planted area.
- Trees and shrubs can reduce noise levels, especially when plantings are combined with land forms and solid barriers.
- Runoff from forested areas is about 17 percent less than from developed areas. Decreasing runoff reduces flooding, pollution, sedimentation in rivers and lakes, and the need for stormwater systems.
- Forests improve water absorption and retention, which increases the recharge of ground water.
- A forest canopy softens the impact of raindrops and allows rain to slowly soak into the ground.
- Forests act as filters and decrease the amount of pollutants transported to streams.
- Roots stabilize the soil, and vegetation creates a wind barrier that reduces soil erosion.
- Forest litter improves the soil, reducing the need for fertilizers.
- A variety of plant species and ages increases the diversity of wildlife—both migrants and year-round residents.
- Trees absorb carbon dioxide and release oxygen.
- Plantings that lower energy use reduce pollution caused by energy production and conserve resources.

Architectural Functions

Trees and shrubs:

- control glare from the sun, headlights, and street lights, and reflected glare from glass, water, snow, and wet pavement;
- accent buildings and provide privacy;
- define space and create buffers between different use areas, such as homes and highways;
- separate pedestrians and vehicular traffic;
- frame and accent desirable views and screen undesirable views.
- add color, texture, scale, and unity to the built environment. They provide variety, seasonal change, and color.

Climate Moderation

- Trees and shrubs can be used to control blowing and drifting snow.
- Groups of trees can reduce wind speeds by 60 to 80 percent, depending on the planting density.
- Trees put moisture into the air and create shade that helps moderate temperatures. This is especially beneficial during the summer around parking lots and other large paved areas that retain heat, and near glass-walled buildings.

Monetary Benefits

- Trees and vegetation are community assets. They increase property values by 5 to 20 percent, thereby increasing the tax base.
- Houses on lots with attractive trees sell for six to 10 percent more than identical houses on lots without trees.
- Landscaped properties have higher occupancy rates and rent and sell more quickly.
- Trees planted appropriately around buildings can reduce heating and cooling costs.
- Vegetation creates an environment that attracts businesses, shoppers, and tourists.
- Nurseries, garden centers, and landscaping and tree care businesses create jobs.

Recreational and Social Values

- Studies show that trees in urban landscapes evoke a “relaxation response” in people and contribute to their physical and mental health.
- Wooded areas and green spaces offer places for recreation, social events, and community interaction. Trees bring nature into the city.
- Studies show that patients recovering from surgery in a room with a view of trees require fewer pain relievers and are released from the hospital sooner than those with a less pleasant view.
- Businesses leasing office space in wooded developments find their workers are more productive and absenteeism is reduced.
- Planting and caring for trees provides physical and psychological benefits for people.
- Trees contribute to the image of a livable city and to feelings of belonging and stability. Trees help connect people to a place.