

The Many Benefits of Trees

Most people plant trees to provide beauty or shade and these are two excellent reasons. However, trees also provide environmental, social, communal, and economic benefits as well.

Environmentally, trees alter our surroundings by capturing storm water runoff, moderating climate, improving air quality, and harboring wildlife. The downward fall of rain, sleet, and hail is initially absorbed or deflected by trees, which provides some protection for people, animals, and buildings. Trees intercept water and store some of it, thus reducing storm water runoff and the possibility of flooding.

Climate control is obtained by moderating the effects of sun, wind, and rain. Radiant energy from the sun is absorbed or deflected by leaves on deciduous trees in the summer. We are cooler when we stand in the shade of trees and are not exposed to direct sunlight. In winter, we value the sun's radiant energy and deciduous trees allow warmth in by shedding their leaves.

Temperature in the vicinity of trees is cooler than that away from trees in summer. The larger the tree, the greater the cooling effect. By using trees in the cities, we are able to moderate the heat-island effect caused by pavement and buildings in commercial areas.

Air quality can be improved through the use of trees. Leaves filter the air we breathe by removing dust and other particulates. Rain then washes the pollutants to the ground. Leaves absorb carbon dioxide from the air to form carbohydrates that are used as food for the trees. Leaves also absorb other air pollutants - such as ozone, carbon monoxide, and sulfur dioxide - and give off oxygen.

Socially, we like trees around us because they make life more pleasant. Most of us respond to the presence of trees beyond simply observing their beauty. We feel serene, peaceful, restful, and tranquil in a grove of trees. We are "at home" there.

Communally, even though trees may be private property, their size often makes them part of the community as well. City trees often serve several architectural and engineering functions. They provide privacy, emphasize views, or screen out objectionable views. They reduce glare and reflection, and direct pedestrian traffic.

Direct economic benefits are usually associated with utility and infrastructure cost savings. Besides providing shade to reduce air conditioning costs in our homes, communities can save money if fewer facilities must be built to control storm water in the region. To the individual, these savings would look small, but to the community, reductions in these expenses are often in the thousands of dollars.

Learn more about the benefits of trees at www.treearegood.com.