Are trees necessary in the city?

Chester Smolski

It appeared as a small news item: the Providence Park Commission had requested that 40 trees be planted along Atwells Avenue as part of the $2.8 million facelift scheduled for Federal Hill but the Providence Redevelopment Agency did not act on the request. Businessmen along the street were also opposed to the plantings because they contended that their shops would not be visible behind the trees and thus, they would lose some potential business. As a result, no new trees will appear along that business thoroughfare.

Certainly nothing against which to demonstrate but there is something here to be considered: Are trees necessary in the urban environment? Are they natural phenomena that are just "pretty" at which to look? Do they not break up our sidewalks, get diseased and then require an expense to remove them? Are they worth the bother?

In Providence we have been doing a good job of getting rid of them. The City Forester has estimated that there were 40,000 street trees in the city in 1950 and, in a survey completed in 1977, he has determined that there are now less than 17,000 trees lining our city streets.

Hurricanes and other severe wind storms have been devastating to our city trees, Dutch Elm disease has essentially removed all of those stately reminders of a bygone era, and the rigors of the urban environment, including salt on highways and paved surfaces through which water cannot percolate to provide life-giving nurients to roots, have all taken their toll. And yet this is all part of the life cycle of these essential parts of the urban setting; from seedling or perhaps sapling, through youth, maturity, old age and, finally, death.

Also to be considered was the absolute neglect by the city which made no attempt to replace those trees which were unable to survive the harsh urban environment. Not only was the city remiss in not replacing trees, but a tree removal required a request of one's local city councilman to act in his favor with the understaffed forestry department which five years ago had a four and one-half year backlog of work. The tremendous loss of trees was relieved only slightly by limited urban renewal funds which provided plantings in those areas undergoing renewal.

Too many urbanites think of trees only in terms of their aesthetics, for example, the cherry blossoms of Washington, D.C. or the oranged lined streets of Jerez in Spain, while too few realize the functional role that trees play.

In a microclimatic study done in the new town of Columbia, Maryland, several years ago, it was found that temperatures in a small park with trees were 25 degrees cooler than in a nearby paved courtyard. Relative humidity was also appreciably higher in the park as the trees gave off moisture to the air through the process of transpiration. Because buildings retain their heat from the day, nighttime temperature contrast between this building and courtyard complex and the area with trees was as much as nine degrees.

Trees also reduce sulfur dioxide and nitrogen oxide in the air by as much as 25 percent. Smoke pollutants in the one square mile of Hyde Park in London are reduced an average of 27 percent by this verdant environment.

Trees add color to the urban setting, help reduce the noise so characteristic of our cities, break the force of winds, establish boundaries, and enhance the appearance of buildings. An excellent example of the latter is the sprinkling of trees in relationship to the architecture of Jackson Square in the old center of New Orleans.

A recognition of the value of trees and verdancy in the city is a long standing tradition, being part of urban planning since the 17th Century. It manifests itself in the tree-lined streets of Paris and the garden squares of London.

The present city administration is aware of the decades of neglect and is attempting to bring back some of this long lost verdancy. A federal grant of $400,000, specifically for tree plantings on 19 streets, has been parlayed with more than $200,000 of community development and urban renewal funds to increase plantings in neighborhoods and renewal areas. A sizable increase in the staffing of the forestry department has reduced the work backlog of diseased and dead tree removal to eight months. It will take years to receive the full benefits of the plantings of these young trees, but such is the problem of the vagaries of city administrations which hold the tax level at the expense of beautiful tree-lined streets that many of us remember with fondness.

Beauty does not come cheap. The City Forester has estimated that last year a tree planted by the city cost $92 while one planted by a private firm came to $200. But one must remember that, unlike built facilities such as street lights which depreciate with time, trees appreciate over time as they grow in size and beauty.

Providence is not a leader in funding greenery. In fact, the less than one-fifth of one percent spent annually for such activity places us well below the national average and points out the major problem of our tree program — inadequate funding.

By itself, the loss of 40 trees along a restored Atwells Avenue will not have a profound impact on the total plantings of trees necessary for a beautiful, green Providence, but it does represent a loss to that street, to that neighborhood, and to those of us who enjoy walking and shopping on the Hill.

• • •

Chester E. Smolski is Director of Urban Studies, Rhode Island College.