Urban Forestry for the Finger Lakes

by Christopher Luley, PhD.

Urban forestry may have a key role to play in the future quality of life in our communities, the quality of our local environment, and health of Canandaigua Lake. Compared to other areas of the country, it has mostly been ignored as a management tool in the Finger Lakes (and in New York State in general).This trend will likely continue unless concerted effort is made to include it in the suite of best management practices to offset development impacts. Urban forest management has the potential to help preserve the quality of our environment and lake while also allowing development to continue.

According to the USDA Forest Service as of 2000, 3.1 % of the U.S. land area was classified as urban yet it harbors nearly 80% of our population. This trend can be visualized every day locally, as more rural land is converted to urbanized development around our highly desirable lake watershed. Without mindful application of urban forestry and planning, development will change the face and quality of our landscapes and lakes forever. Some of these changes are irreversible because of the nature of development, but many of the impacts are avoidable with better urban forest management and planning. Ultimately we do have a choice whether to enhance our local environment with good planning and forest management, or to allow our landscape and lake to degrade as we slowly convert forest and field to low quality (environmentally speaking) landscapes.

Urban forestry is defined as the management of tree populations in urban settings for the purpose of improving the urban environment. This definition is too restrictive, as the American Planning Association (APA) recently acknowledged in a review of urban forestry practices (see the CLWA website for a link to this publication). APA

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recognized that that real importance of urban forestry is its intersection with the process of community planning, and about where and how planning can advance the goals and benefits of the urban forest.

Locally, I see that urban forest management principles desperately need to be integrated into our watershed communities, as well as into the planning and development that is expanding the urban fringe around the lake. This will require affecting management on several fronts: (1) management of trees in communities, i.e., existing treed urban areas on both public and private property (2) protection and preservation of forests and trees and natural features during development and construction in both developed and undeveloped areas, and (3) preservation of soils and natural features in developments where no trees are present so native trees and forests can eventually be re-established.

Clearly this is a very tall order because we are starting from a position where almost no urban forest management is currently being integrated into the planning process. In addition, most local communities are not practicing even minimal urban forest management. However, change is possible, as good examples do exist elsewhere in the country. There, urban forestry in the traditional sense (management of trees in existing urban areas) and protection of trees and forests in developing areas have been made high priority. In many cases, urban forest management and planning were finally integrated because the impacts without it were so significant that public demand drove its acceptance.

Here in the Finger Lakes there is no reason that we can't start with the basics, such as education, and work toward increasing levels of urban forest management and planning. Realistically, we are not that far behind because urban forestry as a discipline is relatively young, and large scale development is just starting to accelerate. Initial recognition of the importance of managing urban tree populations began with a catastrophic start a little over 40 years ago as American elm populations were decimated by Dutch elm disease throughout much of the United States in the 1960's and 1970's. Urban planners and managers recognized from that catastrophe that, without wise planning and management, urban trees could become as much of a detriment as an asset.

A variety of tools are available to aid in the planning and management of the urban forest. Computerized management of urban tree populations became common place in the late 1980's and early 1990's. Today we have computer models that can predict the environmental and economic benefits of urban trees (see iTree.org), and we can easily geo-locate and manage urban trees using online tree inventory and management tools. Urban trees as critical elements of the city infrastructure, or "green infrastructure," is slowly being accepted as a reason for increasing management of urban tree populations (see EPA document on storm water and urban trees at the CLWA website).

The science of arboriculture has also advanced significantly in the past 20 years. We know how to protect trees during construction and development and have advanced tree diagnostic methods at our disposal. Further, industry standards have been developed for nearly every aspect of urban tree management, from pruning and fertilization, to tree risk management and protection of trees during construction and development.

So, it is not a lack of tools, information or need that is in the way. CLWA's Board recognizes that urban forest management should be an important component of their watershed management strategy to maintain the quality of Canandaigua Lake. This recognition should begin an increase in the use of urban forest management around the lake to preserve the quality of the lake into the future. Future articles on urban forestry will focus on management tools and options that would be useful increasing the awareness and potential benefits of urban forest management in the Finger Lakes. CLWA