THE NETWORK BETWEEN UTILITY FORESTRY AND MUNICIPAL FORESTRY: IT DOES EXIST[1]

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Abstract. The association between utility foresters and municipal foresters has been the subject of controversy. To demonstrate that a network does exist with these two groups, goals and objectives are defined by exploring four areas: purpose, attitude, approach, consequence. Comparisons are made to demonstrate how their programs can be integrated for the long-term benefit of the urban forests shared in common.

Webster defines the term network as "any arrangement or fabric of parallel wires, threads, etc. crossed at regular intervals by others fastened to them so as to leave open spaces." Consider how well this describes the association between the various groups that make up the profession we call "urban forestry." **WE** are those groups. Whether we are municipal/county/state foresters, utility foresters, consulting foresters, arborists or horticulturists, we have a common focus: the urban tree. Our professional paths cross at regular intervals at any given moment in the urban forest. Those "open spaces" created by this interaction are what differentiate between us. More often than not, we live and work in a fairly harmonious professional environment. However, there are occasions where such is not the case.

Of controversy has been the association between utility foresters and municipal foresters. A network does exist in many cases but in those where it is not recognized, a basic understanding of both bodies can pave the way to resolution of some time-honored problems.

The conflict between trees and power lines has existed ever since the first utility poles were put up along a tree-lined street. Initially, trees were considered obstructions to the electrification of a nation. Lines were built and the public got its electric power, often at the expense of trees. It should come as no surprise, then, that municipal foresters have long complained about the utility company's seeming insensitivity to trees which interfere with proper line clearance. At the same time, utility foresters have similar sentiments when it comes to the planting practices of municipalities. What we as urban tree managers need to evaluate is "How can we manage the urban forest to satisfy the needs of all including both the municipalities and the utilities?"

To answer this question and get away from the "them against us" mind set, some comparisons will help define each group's goals and objectives. There are four areas to consider: Purpose, Attitude, Approach, Consequence.

Purpose. This is best defined in terms of a mission statement. The utility forester is charged with the responsibility of maintaining electrical service to the power company's customers. This is accomplished by trimming and removing trees growing in the "utility strip" which conflict with the power lines. Put in more simple terms, it is the management of the urban forest growing in proximity to overhead electrical conductors. The municipal forester is charged with the responsibility of maintaining and preserving the integrity of all the components that make up the urban forest of a city or town—the street trees, parks, green ways and, most importantly in the context of this discussion, the street trees growing in the "planting strip" beneath the power lines. This is usually accomplished by replanting trees that have been removed or planting in new areas. Failure to acknowledge each other's "professional purpose" has caused difficulties in the past and portends similar situations in the future.

Attitude. How urban trees are perceived by utility and municipal foresters has much to do with attitude or philosophy. Our attitude toward one another must first be recognized and then appropriately adjusted. Fundamentally, both utility and municipal tree trimming is based on a common goal: to preserve and sustain a healthy urban

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forest. However, there are some differences in the manner in which the trees are addressed.

A municipal forester views the urban tree more as a generalist; each tree is an integral part of the whole urban forest. Condition, vigor, size, maintenance needs, etc. are items that require professional attention for the good of the urban forest as well as the community. On the other hand, a utility forester addresses the urban tree specifically from the top down. A power company's tree trimming specifications require that a predetermined amount of clearance be obtained between the power lines and the trees. When tree work is assessed, the decision to trim or remove is made with the best interest of the urban forest and the community in mind. Repeated trimming accelerates tree decline, sometimes making removal of the tree the better choice.

Once it is accepted that both of these groups have particular expertise relative to their responsibilities, working together for the common good will be an attainable goal.

Approach. This is the "action" element. The implementation of a municipal street tree management program and a utility's vegetation management program is really the key to the "network." The success of these programs depends upon the "management plan."

Most communities across the country that have active urban forestry programs already have some form of a long range management plan. Street tree inventories are the basis on which these plans are developed. From this information the condition of the urban forest is analyzed and a work plan for maintenance, removal and planting is formulated. This is not unlike the process used to develop a utility vegetation management plan. Before scheduled maintenance is performed on a circuit, a pre-job survey of the tree work along the line is conducted. From the information obtained, the amount of trimming required and tree removal work is determined. Allocation of labor and equipment resources, crew makeup and work practices are also established, based on this information.

It seems only reasonable to consider simultaneously the needs of both the municipality and the utility for urban tree management. Such action can prevent a conflict in goals. One example is that of planting. While it is the goal of the municipality to maintain the tree population by replacing trees as they are removed, planting the wrong species in proximity to power lines creates a disastrous situation for both the municipality and the utility. As long as the wrong trees are planted in the wrong place the utility will be obligated to trim, or ultimately, remove them. Maintaining trees genetically geared to grow eighty feet at a height of thirty feet or some reasonable distance away from the power lines is understandably a real maintenance challenge. To avoid such scenarios, many utilities have developed tree lists or books providing alternatives to such favorites as oaks, maples, London plane trees and a host of other tall-growing species that often are planted beneath power lines. The alternative species are selected for low maintenance, insect and disease resistance, availability, and beauty. Mature height must be less than 25 feet. Not only does this type of selection aid the utility, but urban forest managers are recognizing the disadvantages of forcing large scale street trees into the confines of established urban settings. In some cases it is making more sense to begin planting smaller growing trees in highly urbanized areas for the attributes mentioned above.

Another problem for both the utility forester and the municipal forester is that of adequate funding to perform the work outlined in the management plan. However, the utility's vegetation management budget often is significantly larger than the municipality's urban forestry budget. Cooperation allows both organizations to extend the impact of their resources. Further, in many smaller communities, the utility's efforts represent the most significant force for change in the urban forest.

A history of cooperation does exist. A case in point would be the joint tree removal efforts commonly found during the peak of the Dutch elm disease problem in the late 1960's and early 1970's. A similar situation still exists. Many cities share the problem of an "old growth" urban forest along their streets and in their parks. The continual decline of these large, over-mature trees can create hazardous conditions from both a municipal and a utility standpoint. This also is an opportunity to modify the composition of the urban forest. A cooperative removal/replacement program makes a lot of sense in dealing with these trees. By

selectively removing the old growth trees and replanting with more desirable species, those more compatible with an urban lifestyle, a new urban forest is created. Small scale street trees can be integrated into the planting plans of cities, towns, county and state landscape divisions. Maintenance reduction and characteristic low growth are desirable features for all entities involved when dealing with planting areas near overhead electrical conductors.

Removal of large, mature trees, however, can create anxiety in a community. The emotional ties established between citizens and the large, stately trees of their communities are not easily given up. City managers walk a fine line in these sensitive situations. Such tree work is usually a nonbudgeted item, especially in the absence of a municipal forestry department, and "crisis management" is the normal procedure. On the other hand, a utility's forestry department is often better able to deal with the amount of work generated by numerous large tree removals. We can agree on this point: addressing the problem of an aging population of trees is in the interest of the urban forest.

Urban forest management plans are, and will continue to be, important first steps in effective management. Both the municipality and the utility need to identify their respective requirements. Areas of potential conflict must be identified and specifically addressed in the development of such plans. Interaction and communication is, of course, important. Once developed and accepted, the plan should be implemented by both organizations.

Consequence. As a result of a utility company's line clearance activity within the urban forest, trees continue to be trimmed from the top down. Municipal tree work often involves trimming trees from the bottom up. This can create serious problems for the trees! Nevertheless, there is a common need for maintenance from both the utility and the municipal standpoint. Because safety and the related potential for liability is of mutual concern, identifying hazardous tree conditions is critical to both the municipality and the utility company. Dead and dying trees in a park or along a street will eventually fall, possibly causing bodily injury or fatalities. If such trees are close to overhead power lines, their failure could tear down lines and poles, causing outages and other damage. Climbable trees, those with low scaffold branches, provide another safety concern. Someone climbing into the crown of the tree, particularly a child, risks the chance of coming into contact with a high voltage wire and suffering serious injury or death. Tree houses present a similar hazard. Other joint concerns include managing street trees to ensure visibility and clearance for street lights, signage, and both vehicular and pedestrian traffic.

Another issue faced by both groups regarding work performed in the urban forest is that of dealing with "the public." It is an extremely diverse citizenry that becomes emotionally or even physically involved with its trees. There are citizen/customer issues, political situations, legal implications and a myriad of other individual dealings that must be handled promptly and courteously. The power company and the municipality can mutually benefit by recognizing the consequences of their work-related actions.

The purposes, attitudes, approaches and consequences of utility and municipal foresters and their programs need to be integrated. By creating a better network several things will become apparent. One is that the municipal sector answers to the public for all that happens to the urban forest, line clearance tree trimming included. By coordinating work plans and schedules, surprise and non- or mis-communication can be avoided. Another is, that the utility sector has become more cognizant of the impact of their operation on the urban forest. A past history of being perceived in a negative manner poses a challenging opportunity to elicit change.

A common thread running through the management and citizenry of many communities and cities is that of feeling victimized by the utilities and their approach to line clearance tree trimming. Mismanagement or lack of management of line clearance programs in the past may have contributed to this opinion. Many things have changed; the tide is beginning to turn. New pruning techniques, greater knowledge of tree response to pruning, integrated vegetation management programs and professionally administered forestry departments have proven the utility sector to be a

credible practitioner in the art and science of arboriculture. With professional management came a change in philosophy within the industry. Trees that had been viewed as a problem to be controlled are now recognized as a mangement opportunity. This approach recognizes that the urban forest is a dynamic system that will respond to management. The challenge is to direct that response in a way that is consistent with both the utility's goal and that of the urban forest.

Summary

In many respects the utility forester and the municipal forester do speak the same language and similarly orchestrate their programs. This network can be strengthened by communication and cooperation. Utilities are becoming more sensitive to the value of incorporating sound, arboricultural techniques into their vegetation management programs. Likewise, municipal foresters are beginning to recognize utility forestry as an ally. For example, the extra "eyes" out in the field can alert a municipality to insect and disease problems. In smaller communities, line clearance tree trimming may be the only source of tree maintenance. Dead wood and hazardous trees can be addressed with minimal financial impact for the community and the utility company. As more utilities and communities follow this approach, the opportunities for successful cooperation will increase, as will the strength of the network. The result is the long term benefit of the urban forests we share in common.

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McCAIN, A.H., C.S. KOEHLER, & S.A. TJSVOLD. 1987. **Pitch canker threatens California pines.** *California Agriculture* 41(11-12): 22-23.

In the summer of 1986, hundreds of Monterey pines in Santa Cruz County were found with serious branch dieback symptoms that did not fit the pattern of any disorder known in the state. Subsequent investigation confirmed that these symptoms were the result of a fungus known as *Fusarium subglutinans.* The most obvious symptom on Monterey pine is dead branch tips, but entire branches and even tree tops may be dead. A great deal of pitch often oozes from diseased plant parts. The canker is at the junction of dead and living tissue; it is sometimes sunken, yet the bark remains intact. The wood beneath the canker is resin-soaked and honeycolored. Affected trees become progressively worse in appearance, probably as a result of bark beetles exploiting declining tissues.