

WHAT IS URBAN FORESTRY? and ARBORICULTURE? and URBAN HORTICULTURE?

Urban Forestry has been variously defined, but, anywhere, Urban Forestry is a merging of talents from traditional Forestry, moving its focus from non-urban areas to more urban areas.

Arboriculture, that branch of **Urban Horticulture** that deals with the planting and management of individual urban trees, and Landscape Architecture that deals with the design, and often redesign, of the Urban Plantings.

Arboriculture had its origin in the National Shade Tree Conference organized in 1924. Dick Harris, a retired professor here at UC Davis, has been a leader in this discipline for more than 50 years. His text, *Arboriculture*, will be available in room 193; in the original 1983 edition he defined.

Urbanization has caused many problems that have shifted some of the research and management of Traditional Forests. An important problem of urbanization has been the development of an interface between Urban and Rural which often has become the focus of many planning and management problems.

With the increase in urbanization, we have come to realize the importance of the conservation of rural areas, both agricultural and natural. Hence, the improved management of Interfaces with these areas has become a focus as we try to preserve a high-quality habitat in which we and plants and animals can live, as well as retain important agricultural production.

And finally, we have become aware of the deterioration of vegetation within many urban areas. This has led to increased study of how to better manage urban vegetation, i.e. a higher quality habitat for urban plants.

Traditional Forestry, without the “urban”, has a much longer history than urban forestry or arboriculture. Modern Forestry has its roots in European Silviculture and arrived in the US near the beginning of the 20th century, more than 100 years ago. Forestry passed through three major periods during the 20th century and into the present;

- a. The Classical Period began with the arrival of European methods of Silviculture around 1900. Forest reserves, especially on public land were treated as timber reserves and it was the function of Forestry to oversee these reserves. During this period, Theodore Roosevelt won a Nobel Peace Prize for his establishment of the National Park System. His Secretary of Forestry (not yet a Cabinet position) was Gifford Pinchot; we will come back to him in this lecture.

Timber harvesting was done mostly on Private Lands.

The Classical Period ended with WWII.

- b. During WWII, there was such a great demand for lumber to support the war effort that private forests were essentially denuded, and attention was shifted to harvesting public lands. This began the Economic Period in which Economics and Silviculture were combined to maximize the harvest from public lands. They were not treated as reserves during the economic period, and conservation took a back seat. This continued well after WWII, mostly to support the housing boom following the war, bedrooms for Baby Boomers.
- c. The Resource Management Period began in the late 1960's and was a response to strong criticism of the forest practices of the Economic Period by various conservation and environmental groups. This period added considerations for aesthetics, wildlife habitat, watershed and soil protection and recreation.

Urban Forestry evolved very naturally from this approach for two reasons:

- 1.** The urban forest has always been more involved with management than with economic production of forest products.
- 2.** Many social developments in the urbanization of the US led to a serious deterioration of the urban environment by this time period.

THE URBAN FOREST

A. Nature of the Urban Forest

Defines the U.F. as the sum of all woody and associated vegetation in and around dense human settlements, ranging from small communities in rural settings to metropolitan regions.

B. Managing the Urban Forest

Now, that we have defined the U.F., we will start to deal with its Management, and this will dominate the rest of the Quarter. When cities are large, such as Chicago, the acres of land being managed is so large as to present real challenges. The street trees of Chicago are managed by one agency and the parks by another.

Urban Ecology: When we do add the physical factors, humans and animals we have a complete ecosystem and its study has been called Urban Ecology. To some then, Urban Forestry is part of Urban Ecology.

Old Urban: In the oldest parts of most cities are found businesses, older factories, and high density residential. Here, there are usually fewer trees but they are the older, sometimes landmark trees. These trees in many cases are in the worst condition due to a stressful environment of concrete and asphalt.

Suburban: In the suburban zone, humans and residences are less dense, businesses tend to be located in more open shopping centers, newer industries located in more open industrial

parks, and there may be greenbelts and parks. Trees here tend to be newer, although there may be older trees in eastern areas, and these tend to be in better health than their more urban counterparts.

Interface: between these urban areas and rural areas, although lacking walls and moats, have in common a very diverse and often neglected character.

Forests and Society

Social forestry seeks to understand the relationships among human behavior, social systems, natural resources, and the environment. Because natural resource issues are embedded in social and cultural contexts, future forest managers must consider the changing relationships between the biophysical and social environments that shape forest communities and the people who depend on them.



Figure 1: Community forestry project in Algeria. (United Nations Photo.)

Specialization in this area includes studies of forest dependent communities, sociology of natural resources, forest and environmental history, forest and resource policy, park and protected area management, sustainable forestry, human dimensions in ecosystem management, urban forestry, international forestry, and economic development of forests, including non timber forest products and agroforestry. Underlying all areas of social forestry is the understanding of how people shape and are shaped by natural resource systems through their social institutions and cultures. Central to social forestry is the recognition that people and human behavior are natural components of ecosystems. Managing Recreation Behavior. The section on urban forestry treats the unique situation of management of trees and forests located in urban environments. Finally, it provides a description of community-based management of natural resources, which has applications both domestically and internationally. The many issues and challenges of this complex subject are described in detail based on global experiences.



Urban forestry concerns the care of trees and related organisms within the environs of cities, towns, and other developed areas, and is a specialized application of forest science (and art) to the dynamic physical, social, and political environments in which people live and work.