

cities; which are most suitable for shading, noise abatement, esthetic enjoyment, or small wildlife protection?

And third, we need to know more about planning and development methods; how to properly landscape trees on engineered sites such as channeled streams or freeways, how to visually represent alternative landscapes to city dwellers so that they can make informed planning decisions, and how to use city-wide patterns of trees, recreation sites, open spaces, and people. and people.

Our cities desperately need a program of urban forestry. We already have a mandate for the Forest Service to lead and coordinate a program of urban forestry. We know what research needs to be done. It might seem that effective, universal urban forestry is just around the corner. However, this is not exactly the case. Congress still has to fund the program. And, once the program is funded, there will have to be a great deal of cooperation to make the program a success.

Certainly, urban forestry would not have come as far as it has without the support of the National Arborists' Association, the Municipal Arborists' Association, and other members of the International Shade Tree Conference.

We owe a special debt of thanks to the universities which are pioneering programs in urban forestry education — Michigan State Uni-

versity, the University of Michigan, Oklahoma State University, and Southern Illinois University, to name a few.

Cooperation is always an important element in successful research and application. An excellent example is the cooperation between laboratories of the Agricultural Research Service and the Forest Service. The Shade Tree and Ornamental Plants Laboratory and the Forest Insect and Disease Laboratory in Delaware, Ohio, are doing joint research on Dutch Elm disease.

If cooperation has been important in the past, it will be even more important in the future. Urban forestry is only in its infancy, and it will take all our cooperation to help it grow.

Urban forestry is desperately needed. It has come of age. Today, I'm asking you to support urban forestry, and so are this country's 20,000 cities and towns. Together, we can help contribute to the survival of those cities and towns as healthy, pleasant environments for human habitation.

The Forest Service has a little friend called Woodsy Owl, who normally says, *Give a Hoot - Don't Pollute*. Today, I think he might say, *Plant a Tree - and Save a City!*

Forest Service
U.S. Department of Agriculture
Washington, D.C.

ABSTRACT

Baumgardt, J. P. 1975. **When, how to water your trees.** Grounds Maintenance 19(6): 11-12, 14, 17.

All living tissues require a constant supply of water. When growing, plants need ample water to supply new tissues. When in leaf, plants use large amounts of water during light hours for photosynthesis and they lose water constantly through leaf pores (transpiration). The soil must contain sufficient water to supply a plant's needs for living processes, for growth, for photosynthesis, and for respiration. Several rules apply when watering trees. First, try to follow the normal pattern of rainfall, making up any deficiencies of the moment. When you water a tree, water deeply. Newly planted trees should be watered about once each week when rainfall is less than one inch. Trees that have been planted for just a few years, say less than five years, need to be watered deeply when rainfall is scanty for two or three weeks. Try to water every older tree on the property at least once each month during a drought.