

THE ROLE OF STATE & PRIVATE FORESTRY IN IMPROVING FOREST TREES FOR URBAN USE¹

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INTRODUCTION

Many of you probably wonder what a U. S. Forest Service forester is doing at a meeting on improvement of trees to be planted in metropolitan areas. You may have a traditional picture of the forester as a stalwart ally of Smokey Bear--fighting fires, planting trees, managing campgrounds and wilderness, and finding people lost in the great forests of the mountainous West.

A more recent misconception depicts us foresters as destructively clearcutting great tracts of virgin forests in cooperation with big corporate timber interests. How and what are we doing in urban forestry? Do we really have a legitimate role in the very specialized job of developing better trees for street and park planting,

WHERE S&PF FITS IN

Many, if not all of you, may also be wondering exactly what is the role of State and Private Forestry. Incidentally, this is a comment that is often raised by foresters, even by those within the Forest Service. So first, I would like to tell you a little about the organization of the U. S. Forest Service and then get into the topic of State and Private Forestry and metropolitan tree improvement.

The National Forest System manages 1.65 million acres of National Forests in 42 states. These federally-owned acres are used for timber production, camping, hiking, hunting, fishing, watershed protection, esthetic enjoyment, range production, and wilderness recreation. Much of this acreage was reserved from the public domain lands of the West, but considerable acreage east of the Mississippi was purchased from private ownership.

The Research Branch--and several researchers are on the program this afternoon and in the audience--is devoted to

¹ Metro. Tree Impr. Alliance (METRIA) Proc. 1:22-27, 1978.

developing better methods of growing, protecting, and managing all the resources of forest and range land. Their work includes protection from fire, insects, and disease; culture, growth and harvesting of timber; tree genetics; wildlife-habitat improvement; watershed management; use of forest land for recreation; range management; forest survey; forest products; forest engineering; and forest economics. Relatively recent additions to the research program include study of the urban and suburban environment, with emphasis on vegetation, wildlife, and recreation.

State and Private Forestry--S&PF for short--the smallest branch, has as its mission the administration of the various federal programs that provide financial and technical assistance to the states to further their forestry programs. These programs stimulate better forestry through federal matching funds and technical assistance. Much of the state effort helps the private landowner manage his woods to produce the benefits that he desires and society needs. About 60 percent of the nation's timberland is owned by the small non-industrial landowner; improved management of this land can make an important contribution to the nation's welfare.

A great deal of this work has been directed into the traditional timber-oriented activities: tree planting, timber-stand improvement, timber sales, fire prevention and control, and pest management, because most landowners seek the state service forester's advice on timber problems. The landowner wants to know: How do I manage my timber? Where can I sell it? What volume and value do I have?

TECHNICAL ASSISTANCE

But now we see a change toward more emphasis on non-timber uses. This fiscal year, Congress has appropriated half a million dollars to be used for Multiple Use Technical Assistance. This money will enable us and the states to provide expertise in nontimber disciplines such as wildlife biology, landscape architecture, watershed, and range, to provide wider options to the landowner in managing his forest and range lands.

An important part of S&PF's effort is technical assistance, really educational activities to increase the professional skills of the state-employed forester, both the service forester dealing with small private landowners and the manager of the many acres of state-owned forests. In the 20-state area served from our Pennsylvania office, nearly 13 million acres are in state ownership. These states contain half of our nation's population, so their state forests are under heavy pressure to provide recreational opportunities as well as forest products.

These S&PF activities are aimed primarily at the rural forest resource, not the urban tree or suburban green space. How does S&PF become involved with urban and community forestry? Although the Forest Service has long recognized the importance of the urban and community forest, it was not until 1972 that the Cooperative Forest Management Act of 1950 was amended to provide technical and financial assistance to the states for the "protection, improvement, and establishment of trees and shrubs in urban areas, communities, and open spaces". This is our statutory basis for engaging in urban forestry cooperation with the states. An additional 5 million dollars was authorized by this amendment, but the money has yet to be appropriated. We do have reason to believe that funds will be appropriated for urban forestry in the near future.

The intent of this authorizing legislation is that the present level of appropriations will continue to support existing programs. The National Association of State Foresters gave its sanction to this. Thus urban forestry funds will not be available until Congress appropriates funds specifically for urban forestry. Without such funding, S&PF cannot undertake the highly active role in urban forestry that it wishes to.

IMPROVING URBAN TREES

So much for our statutory responsibilities in urban forestry. How does State and Private Forestry work for improvement of metropolitan trees? In fact, you may be wondering if S&PF has any role in development of improved trees for the urban forest, since we cannot engage directly in research.

But S&PF nevertheless does have a role in the improvement of urban trees. Through our relationship with 20 states and their foresters working part-time or full-time in urban and community forestry projects, we can develop a network of observers who are in daily contact with urban tree problems and opportunities throughout the Northeast and Midwest. These foresters provide a mechanism for observing difficulties that are encountered with existing varieties, cultivars, and species under a wide range of climatic conditions, from the cold climates of Maine and Minnesota to the relatively warm and humid Eastern Shore of Maryland and west to the hot and frequently droughty Missouri.

In our contacts and travels throughout this territory, we in S&PF can gather information on many facets of urban tree use and care. Many of you have restriction on your

travel and are often confined by state boundaries; but, in the administration of other funded federal programs, I can directly observe and discuss urban tree problems in 20 states. I should not restrict this gathering of information only to our 20-state territory. In the South, my counterpart, Bob Nobles, has the same capability in 13 states and has been developing his contacts for several years longer than I. In the West, the Forest Service also maintains State and Private people, so that the entire country can be covered by this type of information network.

We also have a more formal system of gathering information in the Northeastern Area, operated in conjunction with the Northeastern and North Central Forest Experiment Stations. This is the "Research Needs Program", into which the state foresters and their staffs are encouraged to feed problems that require research solutions. These needs are sent to the appropriate research project for comment and consideration. The Northeastern Forest Experiment Station maintains three projects in urban forestry and coordinates and funds the activities of the Pinchot Institute for Environmental Forestry Research. Although most of the research-need requests have been concerned with silvicultural, management, and protection problems, we have had a number of inquiries about urban trees.

We can help the urban tree geneticist through our research-implementation activities. Research implementation is an educational activity through which we bring to potential users the latest research information and explain how it can be put into practice. This is done through publications, workshops, and show-me trips. Initially, the researchers, who have developed the new information frequently participate actively in research implementation; later as we become more familiar with the information, the researcher goes back to his studies and we continue the educational work.

Our efforts are limited to the professionals employed by the states, who in turn will influence a larger number of individuals concerned with urban trees. Thus we have an established mechanism for bringing the results of your work to potential users. If great masses of urban and suburban residents and landowners are to be reached, this is done through the Extension Service and the state-employed urban foresters who frequently hold meetings for interested groups of urban people. The mass-medial communications specialists of the Forest Service also help with television, radio, and press outlets.

Tree improvement is a lengthy process, except perhaps for clonal propagation of some lucky sport that has highly desirable features. Until the improved tree is outplanted in the community, the work of the breeder does not come to fruition. We can help in this final step.

COMMUNICATION AND EDUCATION

A continuing theme in the Urban Forestry Working Group of the Society of American Foresters, the Urban Forestry Committee of the International Society of Arborists, in urban forestry workshops such as this, and in all meetings of urban foresters, is the need for better communication among urban foresters. Urban forestry is a new and loosely defined field; it does not have the formal lines of communications that are found in the older professions; it is difficult for urban foresters to become acquainted with one another and learn of their activities. S&PF can promote better communications.

An important S&PF activity is helping to organize, sponsor, and encourage meetings such as this. We have agreed to publish the proceedings of this METRIA meeting. This publication should help establish METRIA as an important forum for urban tree researchers. Next year, we will cosponsor with the host State, Ohio, an urban forestry workshop for our 20 states. The program and location has not yet been selected, but Wooster is favored because of extensive outplanting trials of shade-tree selections on the grounds of the Ohio Agricultural Research and development Center.

Last year a workshop for 13 southern states was jointly sponsored by Florida and S&PF, through Bob Nobles in Atlanta: and the proceedings have been published. A second one is planned within 6 months. Tree breeding and selection continues to be a topic at these meetings. Such meetings expand knowledge of research for the practitioner and should help in getting improved trees into commercial channels for propagation and use.

I believe S&PF's role in urban tree improvement can be summed up in two words: COMMUNICATION AND EDUCATION. We can speed communication among people involved in tree improvement, not only the working geneticist, but also those responsible for propagating, outplanting, and caring for improved trees. We encourage this communication through urban forestry workshops and symposiums, publications describing latest usable research results, and travels and contacts in our 20-state service areas.

There is still a great gap in our urban forestry communications. State and Private Forestry seeks to help to close that gap.

In education we provide technical assistance to the staffs of state foresters in urban forestry in its broadest sense. Although we are presently limited by the absence of specific funding for urban forestry activities, we can sponsor forestry workshops and training sessions in which you are invited to report your progress. The urban tree geneticist can receive feedback from practicing urban foresters at these sessions.

Our established policy is to encourage better care and use of urban trees. We are optimistic that we will shortly have federal appropriations for urban forestry. I predict that expanded programs at the state level will open great opportunities for outplanting of all those better varieties that will help us to expand urban forests for the future.