tory. Furthermore, computerization of inventory data may or may not be warranted. Computerization has the advantage of quick retrieval and easy cross-tabulation of data, but it can be costly and has its own inherent problems and shortcomings.

In conclusion, I would like to emphasize that the state-of-the-art of street tree inventories is still in its infancy. Much work lies ahead. What is needed today more than anything else is the development of a systematic approach that any municipality could use to design, complete and maintain an inventory system. Just where this is going to come from might be argued, but I think the most logical direction to look is to the trial-and-error experience currently being gained by the hands-on practitioners who have a comprehensive knowledge of the overall functioning of street shade tree programs. However, if we are to benefit from this vast field of experience, we must increase our communications. To this end, the free exchange of ideas at sessions like this is crucial for the continued development of street tree inventories. The contributions we are each willing to make in the future will largely determine how fast the state-of-the-art develops and how soon street tree inventories reach their maturity.

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URBAN FOREST PLANNING[1]

by Gary A. Moll

In Southern Maryland we have developed a unique opportunity for the practice of urban forestry and we have called it Urban Forest Planning. The idea for an Urban Forest Planner was conceived by the Southern Maryland Resource Conservation and Development Board (R.C. and D.) with the assistance of persistence of the Southern Region Forestry Staff. The project is funded by the U.S. Forest Service through R.C. and D. and Maryland's Department of Natural Resources, Forest Service.

The Urban Forest Planning project encompasses three counties in Southern Maryland: Calvert County, Charles County, and St. Mary's County, which we title the Tri-County area. The northern borders of the Tri-County are only fifteen miles from Washington and thirty-five miles from Baltimore. Each county is a peninsula extending into the tidal waters of the Potomac River, Patuxent River, and the Chesapeake Bay Estuary. This estuary system is an important natural resource to the area and also acts as a physical barrier limiting population movement.

The R.C. and D. project area includes 1,166 sq. miles of land and water area, all of which is coastal plain. Traditionally, the major industries have been forestry, farming, and seafood. However, recently, real estate and land speculations have been goldmines for today's entrepreneur. Housing developments are sprawling throughout the area at an alarming velocity due to the pressure from the Baltimore-Washington area. Population projections from the Council of Organized Governments for the Washington D.C. area indicate a continuous arm of urban population stretching well into the Tri-County area by 1995! The density is 1-5 households per acre.

Through Urban Forest Planning we intend to retain valuable forest vegetation in this developing area. We are concerned with single tree selections around home sites, strategically retaining screens, buffer strips, and recreation areas

[1]Presented to the Urban Forestry Working Group, Society of American Foresters, Albuquerque, New Mexico in October 1977.

around developments and preserving prime lands for future forest fiber needs. To achieve these goals, my time and efforts are directed towards the ongoing endeavors of the county planner and local developers. We have also found it necessary to operate a strong information-education program with the general public and local county officials.

Our county planners responsibilities include creating or maintaining the counties master plan, zoning ordinance, and subdivised regulations. Each of these items are potential vehicles for incorporating the important features of forests and trees. I have used a different approach with each of the three county planners ongoing organization, interests, and concerns. I have not strongly pursued the creation of new county ordinances concerning forest land or trees. It is my experience that few people can comprehend existing ordinances and even fewer people wish to pay for enforcing new ordinances. Without enforcement, there is little value to these rules. However, much can be gained by utilizing existing ordinances. For example, there is much concern over the Chesapeake Bay estuary system. This is well directed, since it is the most productive estuary system in the world. Sediment has been a major problem and, as a result strict sediment control, laws have been made which are enforced by the counties. Forest land logically fits into this soil stabilization requirement, thus we have a ready made ordinance for preserving forest or tree cover.

In St. Mary's County the Planner is attempting to use the soil series maps available from the Soil Conservation Service as a basis for developing the counties master plan. This is an excellent technique and is ideal for our use, however, not popular with land speculators, or all landowners. I have offered my support to his efforts and have contributed a forest type map for use in the planners presentation. This map shows prime and productive forest groups. It covers a 14,000 acre tract of land.

Work with the developer-builder has been the most expedient method of retaining forest vegetation. The developer-builder is the action man in the development process! He takes a dim view of bureaucracy but will consider a good business offer.

I show the developer that retaining vegetation will increase his sales volume and increase the selling price of his homes (Brian Payne, Photo Story No. 26). I have concentrated my efforts on those men who are sincere about working with natures features. Almost every developer is different so I have worked on many levels depending on the operation.

A large housing project is a likely candidate for a "full blown" mapping of existing natural features. We have used this approach with an 8,000 acre development project in Charles County. This project develops neighborhoods of 200-500 acres at one time. Detailed maps of existing vegetation, topography, and soils can be constructed of the area. By putting each natural feature on a transparent sheet and overlaying these important factors, a logical layout of the neighborhood can be determined. Properly used, this method greatly reduces the impact on the vegetation and existing natural drainage patterns. It also saves future homeowners many headaches. However, the overlay method requires a close working relationship with the developer and ample lead time to complete the work (the detailed soil survey will take about a month).

Most of the smaller developers are not set up to take in this much detailed information. With them, it's best to work in steps. A good starting point is to mark the desirable trees on his lots and help him solve the problems of construction damage to the vegetation. As the working relationship progresses, he will be receptive to making changes in housing and driveway locations to accommodate the vegetation. I have done much work with the Wildewood Community in St. Mary's County. The developer now uses my support to obtain approval of special acceptions with the planning commission as he endeavors to build with the existing natural feature.

An information-education program is essential for our operation. The general public and key county officials in this rural area are not aware of the consequences of urban sprawl or are they aware of the tools that can be used to control this process. The use of techniques such as cluster developments are not used in the counties to any extent. None of the counties are using it effectively to retain forest amenities and St. Mary's County

will not allow clustering at all!

I have been using specific information handouts for building in wooded areas, facts about construction damage to trees, and have written a list of trees for planting trees on streets in Southern Maryland. Also, I have tried to put the social impact on forests and trees into perspective for the general public. I have examples of this material available for distribution.

It is almost impossible to obtain quality street trees from the nursery men in the tri-county area. Siberian elm, silver maple, and hybrid poplars are sold under various super tree titles. These trees make up the majority of the sales in the area. I have started a nursery visit campaign to promote the use of quality shade trees for planting in the county.

Analogies are important educational tools. We can benefit by exploring some of the intensive forest management areas in Europe. Europe has a longer history than we do and has learned from experience the value and importance of forest land. In many cases, they have had to learn the value the hard way, from destruction or over use of the resource, and this is the lesson we have the opportunity to avoid.

In Zurich, Switzerland, for example, there is a forest right in the city which is under sustained yield forest management. This forest produces $80,000 per year in forest products, enough to support the cost of forest management and other city government costs as well (Clark Holscher, The Metro Forest November 1973). The city also receives the benefits of forest land, i.e., noise abatement, climate control, water recharge, recreation, wildlife habitat, and aesthetics.

I hope we have come of age in America. We should see more urban forest planning programs started throughout the country. We should save ourself the trouble of removing the quality vegetation that has rooted just outside our urban areas and start building with the natural features that exist.

Southern Maryland is like numerous other rural areas throughout the country. It is unique only in its *well defined* urban growth pressure and *physically limited* expansion area for urban development. It is unfortunate that the value of our forest areas is not receiving the consideration it deserves. Our Urban Forest Planning Project is only a beginning but it successfully incorporating forest land into an urbanizing area. We have directed our assistance at the county planning process and local land developers. We have also found it essential to promote a strong information-education program. We feel the most effective time to operate an urban forestry program is in the early stages of the urbanization process.

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ABSTRACT

Shurtleff, M.C. 1978. **Pruning for disease control.** Grounds Maintenance 13(1): 30-32, 37.

Pruning of trees and shrubs is done principally to preserve and improve their health and appearance and to prevent damage to property and human life. Anything that can be done to make woody plants more vigorous and eliminate environmental stresses aids in controlling a variety of diseases and insects. Future pest and other problems of trees and shrubs can often be eliminated by proper planting, watering, fertilizing, and pruning. Much corrective pruning of older plants could be eliminated if trees and shrubs are properly planted, watered, and fertilized. Broken, split, diseased, dead and seriously insect-infested branches should be removed whenever found. This helps prevent entrance of canker, dieback, gall, witches'-broom, wilt and wood-decay fungi and bacteria.