**HAMILTON COUNTY URBAN TIMBER SURVEY: A PRELIMINARY PROPOSAL**
**March 10, 2008**

The goal of an urban timber survey is to directly estimate the abundance, quality, and accessibility of saw logs contained in the trees of Hamilton County's urban forest. The survey will employ satellite-based procedures to select a sample of urban trees and on-site methods of assessing their saw-log content, quality, and accessibility. The sample of trees will be drawn from four different urban land types and will include both public and privately owned properties. This will provide full coverage of the County's urban forest.

The findings from the survey will provide a direct and accurate estimate of the board feet of potential lumber available within Hamilton County's urban forest. These findings will serve as a basis for encouraging the highest and best use of the County's urban forest by both local government and by local businesses. At present, potential saw log quality trees in this area are either being underutilized as mulch and firewood or are being treated as green waste. In the latter case, their market value is completely lost and, in addition, costs are incurred for their disposal.

In 2005, Professor David MacFarlane of the Michigan State University conducted the first-ever urban timber survey in the U.S. His survey covered thirteen southeastern Michigan counties that include Detroit, Lansing, and Ann Arbor. Professor MacFarlane, working with Professor Sam Sherrill of the University of Cincinnati, will direct the Hamilton County survey. The results from the two surveys will be directly comparable.

For the Detroit-Lansing-Ann Arbor area, Professor MacFarlane found that the urban forest, in standing trees, contained 327 million board feet. Of that, about three-fourths (235 million board feet) were accessible. Almost 90 percent consisted of commercially valuable hardwoods such as oak, ash, hard maple, hickory, and poplar. And, almost half fell into the two highest quality saw log grades. Professor MacFarlane very conservatively estimated that about 2 percent or the forest comes available annually as saw logs: this amounts to just under 5 million board feet, enough to fully supply five small to medium saw mills. Estimates comparable to these would be the findings from a Hamilton County survey.

Thought should be given to a survey that covers the seven-county metropolitan area since this is a regional natural resource that will be harvested and utilized throughout the region.

No precise cost can be provided at this time since expenses depend on the sample size, the geographic scope of the survey (County versus region), and whether the tree assessment can be done locally (by, for example, U.C. students) or by those trained in Michigan. For purposes of initial planning, a working range is between $40,000 and $50,000. This is a labor-intensive effort since every tree selected into the sample must be measured and assessed on-site and in-person. The travel expenses of getting to the trees will be a significant part of the cost as well. Both Professors' MacFarlane and Sherrill would be compensated for directing the study, analyzing the data, and providing a final report.

Sam Sherrill, Ph.D.
School of Planning
University of Cincinnati
Samuel.sherrill@uc.edu
(513) 248-0509