

Mobile Community Tree Inventory (MCTI) System

Putting Technology Into the Hands of Communities

The Challenge

Until recently, collecting inventory data on public and private trees has involved the use of expensive computerized data recorders or simple paper systems to record information. Collecting and managing the information required equipping inventory personnel with complicated and expensive hand-held data recorders, or manually entering data once the field work was complete.

The Solution

The Northeastern Area's Northeast Center for Urban and Community Forestry, in partnership with the University of Massachusetts-Amherst and the city of Springfield, Massachusetts, developed the Mobile Community Tree Inventory (MCTI) System. This three-tiered system is designed to utilize the latest in technology, while enabling users to select a level that matches their needs and comfort level. It incorporates hand-held personal digital assistants (PDA's), collectively referred to as palm pilots, as an affordable and easy-to-use method of data collection.

- The MCTI System originated from an idea to design a tree inventory software application that could be distributed to arborists, tree managers, city foresters, and consultants at no cost via the Internet.
- The system was designed as a stand-alone program, requiring no additional computer software.
- The system allows users to choose from three components—a paper inventory tally sheet, a desktop application for inputting collected data, and a fully computerized system incorporating desktop software and data collection software designed for PDA's.
- The three-level system enables users to easily master each level and advance to the next.
- Users can customize the program to meet their specific needs.

The Mobile Community Tree Inventory (MCTI) System offers communities an affordable, easy to implement, tree inventory system.



MCTI - Mobile Community Tree Inventory
USDA Forest Service & Park Dept. of Springfield, MA

Background
The idea behind The Mobile Community Tree Inventory (MCTI) system was to design a tree inventory software application that could be distributed to arborists, tree managers, city foresters and consultants at no cost via the internet, and have it packaged as a stand alone program, requiring the purchase of no additional computer software

Three Components of MCTI
The MCTI system is comprised of three components, with each component building on the foundation of the previous level. The three levels include the following:

1. Paper tally sheet template
2. Computerized desktop inventory program
3. PDA data collection program

A firm, organization or municipality needs to identify the level of MCTI capability they feel is appropriate for their needs and begin working with that MCTI component. Some organizations may have previous inventory experience and feel comfortable starting with the third level of the MCTI process; other organizations may want to start at the first step.

THE TOOLS
Paper Tally Sheet Template - This tally sheet provides the simplest least technical tool for recording information on trees that are inventoried. It is a simple paper form that is based on an Excel spreadsheet. The Excel spreadsheet can be obtained by clicking on [Paper Tally Sheet Template](#) on the Download section of this page.

MCTI Desktop Inventory Software Application - This component in the MCTI system is a computer-based software application. This software resides on your computer much the same way a word processor or e-mail application does. The software uses an easy to use screen to enter the data and a database to store information. The data can be entered from the paper-based forms or by using a PDA. Trees in the MCTI database system can easily be searched or modified with just a few mouse clicks, instead of searching a file cabinet. The MCTI system comes with a summary report that produces over two dozen useful statistics. Download it by clicking on [MCTI Inventory Software Application](#) in the Download section of this page.

MCTI PDA Data Collection Software Package
The most efficient and cost effective way to collect and analyze tree inventory data is to use the complete MCTI package. The package includes the desktop software and the data collection software designed for the PDA. The PDA data collection software is free and simple to download it by clicking [MCTI Install.PRC Application](#) in the Download section of this page.

Downloads

[Paper Tally Sheet Template](#)
MCTI Inventory Software Application (Desktop Component)
MCTI Install.PRC Application (PDA Component)
MCTI User Manuals [Microsoft Word Version \(7/17/02\) 555kb](#)
[Adobe Acrobat PDF Version \(7/17/02\) 1.28mb](#)
[MCTI Registration Page - Register here for software updates](#)

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Information on the Mobile Community Tree Inventory system can be found at www.umass.edu/urbantree/palm/.

Resulting Benefits

- The use of PDA's significantly increases efficiency and reduces the potential for data input error, as well as enables data to be downloaded quickly.
- The free Internet download makes the program available to a wide range of users and communities that could not otherwise afford to implement a tree inventory system.
- Users can document the overall condition of their urban forest, including species and age class distribution, tree health, and identification of hazard trees, so that a comprehensive management plan can be prepared for meeting short- and long-term goals.

Sharing Success

- Dozens of users have downloaded the program from the Internet site: www.umass.edu/urbantree/palm/. An online registration program was recently initiated to track users.
- The program was featured in the November 2001 issue of *Tree Care Industry* (circulation 50,000), published by the National Arborists Association.
- Workshops are highlighting the program in Massachusetts, Rhode Island, and New Hampshire.



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