

LMS Inventory Wizard

By Kevin Zobrist

The Inventory Wizard is a tool that makes it easy to get started with the Landscape Management System (LMS). LMS is a free software package that integrates forest growth, visualization, and spatial models in a user-friendly environment. LMS enables landowners to simulate management alternatives for their forest and evaluate projected outcomes through tables, charts, and computer-rendered images. The Inventory Wizard guides users through the process of assembling the forest inventory data needed to run LMS. Inventory information is entered through a series of easy-to-use forms. The Inventory Wizard automatically formats this information and loads it into LMS so that users can immediately begin using the system.



Getting Started

The Inventory Wizard guides users through the entire process of preparing data for use in LMS. The first step in using the Inventory Wizard is to run the Growth Model Selection Guide. LMS includes several different tree growth models, with variants covering different regions throughout the U.S. The Growth Model Selection Guide asks a series of geographic location questions and then recommends the growth model(s) and variant(s) that are likely to produce good results.

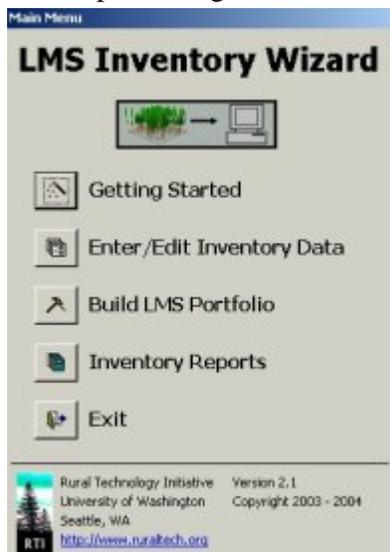


Figure 1: Inventory Wizard Main Menu

Once a growth model and variant have been selected, the Inventory Wizard provides the appropriate forms for collecting inventory data in the field. Separate forms are provided for stand-level information (e.g. acreage and site index) and plot-level information (e.g. plot size and tree measurements). Items on the field inventory forms are separated into three categories: required (the minimum information needed for LMS to run), recommended (necessary to get realistic results from the growth model), and optional (can be used to further calibrate the growth model or for the user's records). This helps clarify what information is needed and allows an informed decision about how much data to collect in the field. All of the field inventory forms are in pdf format, and users can print out as many copies as they need. The forms can even be printed on waterproof paper to create weather-resistant plot cards.

Entering Data

Once users have their inventory data ready, either by gathering existing data or by collecting new data using the field inventory forms, the data can be entered into the Inventory Wizard through a

series of on-screen forms such as the one shown in *Figure 2*. The on-screen forms have a layout similar to the field inventory forms, which makes the data entry process simple and straight-forward. Users can position the mouse above any field or button on the form, and a brief explanation and instructions for use will appear. The same message will also appear at the bottom of the screen when a field is selected. The Inventory Wizard makes sure that all required fields are filled in, and if it detects missing or invalid information it will guide the user in correcting the problem. Special fields such as species and location provide a drop-down list of choices recognized by the selected growth model. Selections are then automatically converted to the alphanumeric code used by LMS.

Figure 2: Inventory Wizard data entry form

Data entry starts with stand-level information. Once stand information is entered, plots can be added. The Inventory Wizard is versatile and can accommodate almost any plot sampling design, including fixed plots of any size, variable radius plots, and transect (i.e. line intercept) sampling for downed logs. Up to five nested subplots can be accommodated for any given sampling point. Once plot information is entered, trees can be added. Per acre expansion factors are automatically calculated based on the plot type, size, and total number of plots.

Portfolio Management

The Inventory Wizard can store an unlimited number of LMS datasets, which are known as portfolios. The Inventory Wizard makes it easy to manage portfolio data, including adding, deleting, duplicating, or modifying portfolios. When all the data for a portfolio has been entered, the Inventory Wizard will build the LMS data files in one step. The portfolio is then ready for use in LMS.

Getting the Inventory Wizard

Both the Inventory Wizard and the LMS program itself are available for free download. Free CD-ROMs are also available from RTI upon request. The Inventory Wizard works on computers running Microsoft Windows 98 or later. Microsoft Access 2000 or later is also required. For computers not running Access 2000 or later, free runtime components will be installed to allow full use of the Inventory Wizard. A tutorial is included that covers every aspect of the program in detail.

Download the Inventory Wizard: <http://lms.cfr.washington.edu/lmsinvwizard.html>

Download the LMS program: <http://lms.cfr.washington.edu/lmsdownload.php>

Contacts: For more information visit the RTI website at www.ruraltech.org or contact Kevin Zobrist, Rural Technology Initiative, University of Washington (206) 543-0827.