

# **F o R M S : F O R E S T L A N D M A N A G E M E N T S O F T W A R E**

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## **ABSTRACT**

FoRMS is an inventory application being developed at the School of Forest Resources, Penn State University. The idea for FoRMS arose from a desire to collect and manage quantitative and qualitative forest inventory data in an automated manner.

The overall intent of the software is to provide a forest manager with a system to:

1. Collect forest inventory and harvesting data
2. Collect related GPS features
3. Analyze and summarize the data
4. Provide complete report generation
5. Link the database to a GIS
6. Offer all of the above on a field computer that can be updated in the field and taken to prospective clients

FoRMS consists of two programs; PenFoRMS, which runs on windows-based pen computers, and FoRMS, which runs on a standard desktop PC. Both programs utilize a system of replicated Microsoft Access databases with a custom user interface developed in Visual Basic. PenFoRMS offers complete delineation, inventory, and harvesting data collection forms, dynamic calculation of stand/stocking/sale volumes, and complete report generation. Additionally, the pen computer has the ability to run GPS and GIS applications, providing the user with a full featured, mobile information system.

The field unit is connected to a standard office PC through a 100 Mbit Ethernet connection. FoRMS on the desktop offers additional report options, database utilities, import/export capability, query generation, and field computer setup options.

FoRMS is currently in a beta stage of development; it is being tested successfully on the School's Experimental Forest, and we are under an agreement with a forestry consulting firm to provide field testing and development assistance.