

Reprinted from

**Symposium on
Machine Processing of
Remotely Sensed Data**

June 29 - July 1, 1976

The Laboratory for Applications of
Remote Sensing

Purdue University
West Lafayette
Indiana

IEEE Catalog No.
76CH1103-1 MPRSD

Copyright © 1976 IEEE
The Institute of Electrical and Electronics Engineers, Inc.

Copyright © 2004 IEEE. This material is provided with permission of the IEEE. Such permission of the IEEE does not in any way imply IEEE endorsement of any of the products or services of the Purdue Research Foundation/University. Internal or personal use of this material is permitted. However, permission to reprint/republish this material for advertising or promotional purposes or for creating new collective works for resale or redistribution must be obtained from the IEEE by writing to pubs-permissions@ieee.org.

By choosing to view this document, you agree to all provisions of the copyright laws protecting it.

A COMPUTERIZED MAPPING SYSTEM FOR
FOREST RESOURCE MANAGEMENT PLANNING

D. W. Smith, S. A. Nottingham, and C. W. Wade
Department of Forestry and Forest Products
Virginia Polytechnic Institute and
State University
Blacksburg, Virginia 24061

ABSTRACT

Large volumes of inventory data are collected and analyzed with the idea of developing resource management schemes for the future. Unless this inventory information is easily accessible, is of the type needed to make management decisions in accordance with current policy, and has a readily available updating system, the entire management plan often becomes a seldom, if ever, used document.

This study deals with the application of several inventory collection and display techniques to assist in making rapid and accurate resource management decisions on a continuing basis. The objective of the study is to develop a comprehensive forest resource management plan for the U.S. Department of the Army, Corps of Engineers Philpott Reservoir Complex located on the Piedmont geomorphic province near Bassett, Virginia. Specifically the management plan is focused on increasing the value of the lands primarily for recreation and wildlife with the inclusion of other compatible uses where appropriate. A healthy and vigorous forest system is required in order to withstand the stresses imposed by man and nature. Therefore, a forest complex capable of supporting the planned recreation, wildlife, scenic attractiveness and other project uses must be maintained so as to yield the maximum social benefit and insure the ecologic integrity of the system.