

NC STATE UNIVERSITY
College of Natural Resources
Forestry Educational Outreach Program
Campus Box 8003
Raleigh, NC 27695-8003

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Accurate Forest Inventory

*Basics of practical and efficient
timber cruising*

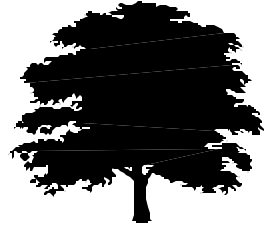
**A Great Review for the
NC Registered Foresters Exam!
Valuable Information for Appraisers!**



**April 2 - 3, 2003
McKimmon Center
North Carolina State University
Raleigh, NC**

Sponsored by
Forestry Educational Outreach Program
NC State University Department of Forestry

Accurate Forest Inventory



About the Workshop

This workshop will give timber cruisers, forestland managers, and appraisers the information they need to design accurate and efficient forest inventories. The instructor will explain the major methods of inventory cruising, including prism, fixed plots, and strips. Participants will learn to develop statistically reliable inventories and to make informed conclusions based on cruise results. **The field exercise will provide opportunity for hands-on comparison of the various inventory methods.** Emphasis will be placed on practical considerations with numerous applications and examples. **This course will also be a great review for foresters required to take the North Carolina registered foresters exam.** Registration includes a comprehensive notebook with material covered in the course.

About the Instructor

Steve Daniels is a forestry consultant in North Carolina. In addition to traditional forest management, Steve specializes in large inventories and mensuration projects, including growth and yield modeling, volume table construction, and photogrammetry. Steve has a B.S. and M.F. in forest management from NC State University, where he has taught mensuration since 1993.

Continuing Education Credits

This workshop will offer 14.5 Category 1 Continuing Forestry Education credits authorized by the Society of American Foresters, and 16.0 CE hours approved by the North Carolina Appraisal Board.

Registration and Fees

The registration fee is \$225. This includes two full days of instruction, course materials, lunches, refreshment breaks, and field trip transportation.

Registration deadline is March 26th. In order to enhance the experience of all participants, enrollment in the workshop is limited to the first 36 registrants. *Cancellations made by March 26th will receive a refund less a \$25 service charge.*

Equipment

Field equipment will be provided; however, attendees are encouraged to bring their own equipment if possible (prism, D-tape, compass). All attendees should bring a calculator and appropriate field attire, including rain gear.

Workshop Location and Lodging

The workshop will be held at the McKimmon Center on the North Carolina State University campus in Raleigh, NC. A map indicating the location of the workshop and parking areas will be included with your registration confirmation letter. *Lodging is not included in the registration fee.* Hotels convenient to NCSU campus include the Ramada Inn-Blue Ridge 919-832-4100, and the Brownstone Hotel 919-828-0811.

Upcoming FEOP Workshop: (6 CFEs)

Ecology & Management of Migratory and Resident Birds
April 29, 2003 - Cool Springs Ctr, Askin, NC
May 6, 2003 - Hill Forest, Bahama, NC

For more information on this workshop and the Forestry Educational Outreach Program, visit our web page at www.ncsu.edu/feop or contact Becky Bowers at 919-515-9563 (phone), 919-515-6883 (fax), or becky_bowers@ncsu.edu

Accurate Forest Inventory Course Agenda

Day 1 (Wednesday, April 2, 2003)

- 8:00 a.m. **Registration**
8:30 a.m. **Introduction: Workshop Overview**
8:45 a.m. **Inventory Statistics**
Why cover statistics?
Statistical terms and calculations
Number of measurements required
Acreage estimate variability, use of GPS
10:15 a.m. **Sample Designs**
Random vs. Systematic
Stratified vs. Unstratified
Pre- vs. Post-stratification
Cruise intensities
12:00 p.m. **Lunch**
12:45 p.m. **Fixed Plots**
Theory
Choice of plot size
From plots to estimates
Stand and stock tables
2:30 p.m. **Variable Plots**
Theory
Advantages
Instruments
Choice of basal area factor
From plots to estimates
Stand and stock tables
4:00 p.m. **Strips**
Theory
Type and size of strips
From strips to estimates
4:30 p.m. **Selecting Volume Tables and Form Class**
5:15 p.m. **Adjourn**

Day 2 (Thursday, April 3, 2003)

- 8:00 a.m. **The Cruise Report**
Interpreting the results
Answering questions with the report
Assessing the cruise and the report
10:00 a.m. **Field Exercise: Data Collection**
12:00 p.m. **Lunch**
12:45 p.m. **Cruise Calculations with Field Data**
2:30 p.m. **Interpreting Our Results**
Answering questions with our data
Assessing our performance
Conclusions
3:15 p.m. **Bidding on the Results**
Assessing the impact of variability on sale bids
Impact on appraisals
Impact on management planning
4:00 p.m. **Miscellaneous Considerations**
Diameter only cruising
Local volume tables
Reducing the sample size
Final questions
5:15 p.m. **Adjourn**

Note: The workshop will take place, rain or shine. Please dress accordingly.



Registration Form Accurate Forest Inventory Registration Deadline is March 26th.

Name _____
Organization _____
Address _____
City _____ State _____ Zip _____
Daytime Phone _____
Fax _____
E-Mail _____
Vegetarian Meal Required? _____

Method of Payment

Registration Fee: \$225

_____ Check (*make payable to NC State University*)
_____ Credit Card (*MasterCard or Visa ONLY*)
Card #: _____ - _____ - _____ - _____

Expiration Date: _____
Name of Cardholder: _____
Address of Cardholder: _____

I agree to allow NC State University to charge this credit card for the workshop registration.

Cardholder Signature: _____

Send payment to FEOP, NC State University, Campus Box 8003, Raleigh, NC 27695; or FAX: 919-515-6883

FOR OFFICE USE
date rec'd _____ amt. _____ ck#: _____
V/MC chgd _____ conf. sent _____ dep. date _____