

NC STATE UNIVERSITY
College of Natural Resources
Forestry Educational Outreach Program
Campus Box 8003
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Accurate Forest Inventory

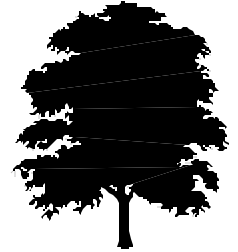
*Basics of practical and efficient
timber cruising*



July 31 - August 1, 2001
Bent Creek Experimental Forest
Asheville, NC

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

Accurate Forest Inventory



About the Workshop

This workshop will give timber cruisers and forestland managers 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.

CFE Credits

This workshop will offer Category 1 Continuing Forestry Education credits authorized by the Society of American Foresters.

Registration and Fees

The registration fee is \$275. This includes course materials, refreshment breaks, lunches, and field trip transportation. **Registration deadline is July 23rd.** Enrollment in the workshop is limited to the first 30 registrants. *Cancellations made by July 23rd 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. All attendees should bring a calculator and appropriate field attire, including rain gear.

Workshop Location and Lodging

The workshop will take place at the Bent Creek Experimental Forest in Asheville, NC. A map indicating the location of the workshop will be included with your registration confirmation letter. *Lodging is not included in the registration fee*, however, rooms have been blocked at the Hampton Inn-Biltmore Square in Asheville until June 30th. To make reservations call 828-667-2022 and let them know you are part of the "NCSU Forestry Department Group".

**Accurate Forest Inventory
Course Agenda**

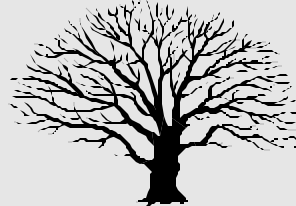
Day 1 (Tuesday, July 31, 2001)

- 8:30 a.m. **Registration**
- 9:00 a.m. **Introduction: Workshop Overview**
- 9:15 a.m. **Inventory Statistics**
 - Why cover statistics?
 - Statistical terms and calculations
 - Number of measurements required
 - Acreage estimate variability, use of GPS
- 10:30 a.m. **Break**
- 10:45 a.m. **Sample Designs**
 - Random vs. Systematic
 - Stratified vs. Unstratified
 - Pre- vs. Post-stratification
 - Cruise intensities
- 12:00 p.m. **Lunch (provided)**
- 12:45 p.m. **Fixed Plots**
 - Theory
 - Choice of plot size
 - From plots to estimates
 - Stand and stock tables
- 2:15 p.m. **Break**
- 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**
- 5:00 p.m. **Adjourn**

Day 2 (Wednesday, August 1, 2001)

- 8:00 a.m. **The Cruise Report**
 - Interpreting the results
 - Answering questions with the report
 - Assessing the cruise and the report
- 9:30 a.m. **Break**
- 9:45 a.m. **Field Exercise: Data Collection**
- 12:00 p.m. **Lunch (provided)**
- 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
- 3:00 p.m. **Break**
- 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
- 5:00 p.m. **Adjourn**

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



Registration Form

Accurate Forest Inventory
Registration Deadline is July 23, 2001

Name _____
 Organization _____
 Address _____
 City _____ State _____ Zip _____
 Daytime Phone _____
 Fax _____
 E-Mail _____
 Special accommodations required _____

Method of Payment

Registration Fee: \$275

Check _____ make payable to NC State University
 Credit Card: ___ MasterCard ___ Visa **ONLY**
 Card #: _____ - _____ - _____ - _____
 Expiration Date: _____
 Name of Cardholder: _____
 Address Card is Billed to: _____

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 _____



For upcoming workshops and more information on the Forestry Educational Outreach Program visit the FEOP home page at www.ncsu.edu/feop or contact Susan Moore at 919-515-3184 (phone), 919-515-6883 (fax), or susan_moore@ncsu.edu