

NC STATE UNIVERSITY
College of Natural Resources
Forestry Educational Outreach Program
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**Introduction to Applied
GPS for Natural Resource
Professionals**
October 14-15, 2002

Introduction to Applied GPS for Natural Resource Professionals



October 14-15, 2002
North Carolina State University
Raleigh, NC

Sponsored by
Forestry Educational Outreach Program
NC State University Department of Forestry
NC State University Center for Earth Observation

Introduction to Applied GPS for Natural Resource Professionals

About the Workshop

Global Positioning System (GPS) technology is taking the Natural Resource community by storm. Knowing how to properly use this technology can greatly speed up the processes of mapping and inventorying. The workshop will cover the use of GPS for field data collection. Attendees will learn how to collect data with a Trimble Geo-Explorer III GPS unit, edit and display the data using Pathfinder Office Software (v. 2.9). The course offers custom designed training specifically for natural resource professionals. The course will be limited to the first 24 registrants.

Who Should Attend?

This workshop is essential for any natural resource professional involved in inventory, management or mapping. Whether you are a beginner or know the basics of this technology, the workshop will increase your speed and accuracy, teach you to incorporate it into your work, and bring you up to date on current technology trends.

About the Instructor

Charlynn Smith has a BS in Recreation Resources Administration, and a Masters of Natural Resources degree with a technical option in Spatial Information Science from NC State University. She has over 10 years experience in Natural Resource and Park Management and is currently a Research Associate with the NC State University Center for Earth Observation. Her area of expertise is in spatial database development for natural resource inventory management. Charlynn has presented lectures to university classes in the NCSU College of Natural Resources and taught numerous GIS and GPS training courses for National Park Service employees and K-12 educators.

Registration Information

The registration fee is \$335 and includes course handouts, and refreshment breaks. Lunches will be on your own. The registration deadline is October 7, 2002, and early registration is strongly encouraged. Enrollment is limited to the first 24 registrants. *Cancellations made by October 7th will receive a refund less a \$20 service charge. Refunds will not be given for cancellations after October 7th - in this case it is recommended you send a substitute.*

Ask us about discounts for multiple registrants from the same organization.

Workshop Location and Lodging

The workshop will take place in Room 5103 Jordan Hall on the North Carolina State University campus in Raleigh, NC. A map indicating the location of the workshop will be included with your registration confirmation letter. The field exercises will be held at Schenck Forest, approximately five miles from the campus, and field trip transportation will be provided.

Lodging is not included in the registration fee, however, a list of local hotels will be provided with your confirmation letter.

Accreditation

This workshop will offer 15 Continuing Forestry Education (CFE) credits authorized by the Society of American Foresters, 13 hours of continuing education from the NC Appraisal Board, and 13 Professional Development Hours (PDH) from the NC Board of Examiners for Engineers and Surveyors.

For upcoming workshops and more information on the Forestry Educational Outreach Program visit the FEOP home page at www.ncsu.edu/feop or contact Becky Bowers at 919-515-9563, fax 919-515-6883 or becky_bowers@ncsu.edu



Introduction to Applied GPS for Natural Resource Professionals

October 14-15, 2002 Raleigh, NC

Day 1: Monday October 14, 2002 - 9:00am-5:00pm

How GPS Works

- GPS terminology
- Error and Uncertainty in GPS
- Operating the Trimble GeoExplorer III - NCSU Campus
- Configuring the GPS Unit
- Collecting data – points, lines and areas
- Using the Trimble Pathfinder Office GPS software
- Mission Planning and Data Dictionaries
- Data transfer between rover and PC
- Data display and feature editing
- Discussion of data correction

Day 2: Tuesday October 15, 2002 - 8:00am-5:00pm

Field Data Collection at the NCSU Schenck Forest

- Discussion of problems associated with field data collection
- Canopy interference
- Collection of point, line and polygon data
- Post-Processing Data Using Trimble Pathfinder Office GPS Software
- Data transfer
- Differential correction of data
- Viewing data with an aerial image backdrop
- Printing a quick map

Choosing the GPS that is right for you

- What types of GPS systems are available?
- Which are appropriate for your work?
- What equipment and software do you need?

Note: The agenda for the workshop will depend on the weather. However, the workshop will take place, rain or shine. Please come prepared and dress accordingly for field exercises on both days.



Registration Form Introduction to Applied GPS for Natural Resource Professionals

Registration Deadline is October 7, 2002

Name _____

Organization _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____

Fax _____

E-Mail _____

Special meal or accommodations required _____

I wish to receive: ___ 15 CFEs for foresters
 ___ 13 hours for appraisers
 ___ 13 PDHs for engineers/surveyors

Method of Payment

\$335

Check _____ make payable to NC State University

Credit Card: ___ MasterCard ___ 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.

Signature of Cardholder: _____

Send payment to Forestry Educational Outreach Program, NC State University, Campus Box 8003, Raleigh, NC 27695 or fax with credit card information to 919-515-6883.