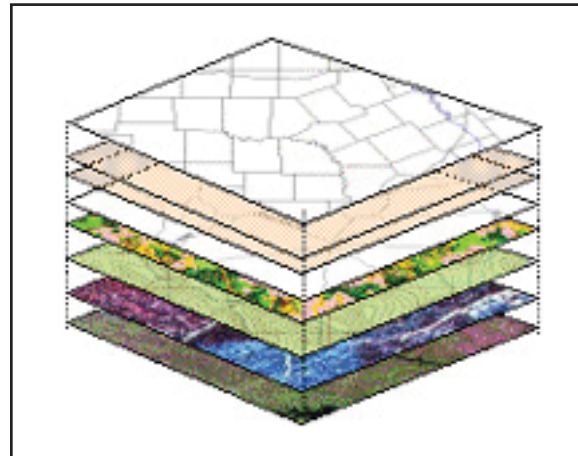


Nonprofit Org.  
U.S. Postage  
**PAID**  
Raleigh, NC  
Permit No. 2353

# Intermediate to Advanced Topics in GIS for Natural Resource Professionals

*April 19-20, 2007*

*McKimmon Center  
NC State University  
Raleigh, NC*



## *Sponsors*

NC State University  
Forestry & Environmental Outreach Program,  
Department of Forestry &  
Environmental Resources,  
and  
Center for Earth Observation

## Intermediate to Advanced Topics in GIS for Natural Resources Professionals

---

### **About the Workshop**

In the past decade Geographic Information System (GIS) technology has become fully integrated into all aspects of natural resources management. Knowing how to properly use this technology can greatly speed up the processes of mapping and inventorying. The workshop is designed around practical examples and exercises that are most valuable to natural resources professionals.

### **Who Should Attend?**

This workshop is designed for natural resource managers responsible for precise inventorying and mapping of land holdings. It will also give the seasoned GIS user some new and advanced skills pertaining to environmental and ecological landscape assessment. Previous training and utilization of GIS technology is a prerequisite to taking this workshop. Please note that the workshop can only accommodate 24 participants.

### **Our NC State Instructors**

**Dr. Stacy Nelson** is an Assistant Professor within the Department of Forestry and Environmental Resources and the Center for Earth Observation. His research centers around the use of remote sensing and GIS technologies to address both regional and local-scale questions of land use/cover change and the impacts on aquatic systems.

**Mr. Bill Slocumb** is a Research Associate with the Department of Parks, Recreation and Tourism Management, and the Center for Earth Observation. His research is on geographic information systems, global positioning systems, and remote sensing. He has developed and instructed GIS training for the National Park Service, NC Division of Forest Resources, and has assisted with the development and teaching of graduate level courses on spatial information systems.

## Accreditation

The workshop will likely offer 11 Category 1 Continuing Forestry Education (CFE) credits from the Society of American Foresters. In addition, the workshop is being reviewed for continuing education units relating to landscape architecture, engineers/surveyors, and appraisers. Please notify us if you feel there are additional professional continuing education credits applicable.

## Workshop Location and Lodging

The workshops will be at the McKimmon Center located on the NC State University campus in Raleigh, 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. Visit our web page to see a list of local lodging options: [www.ncsu.edu/feop](http://www.ncsu.edu/feop)

## Registration and Fees

The registration fee for the workshop is \$495 and includes course handouts and computer lab privileges. The deadline to register for the workshop is April 12, 2007. Cancellations received by the FEOP office on or before April 12 are eligible for a refund of \$450. Cancellations after April 12 will not receive a refund. Sending a substitute participant is recommended in this situation.

## Upcoming FEOP Workshops

ID and Management of Forest Birds - May 2, 2007  
Investing in Southern Pine - May 8, 2007  
Jurisdictional Wetland Delineation - May 14-18, 2007

For more information, or to update your mailing address, go to [www.ncsu.edu/feop](http://www.ncsu.edu/feop) or contact Kelley McCarter at 919-515-3184 or [forestry\\_outreach@ncsu.edu](mailto:forestry_outreach@ncsu.edu).

## Topical Agenda for this Workshop

Day 1 - Thursday, April 19 - 9:00 am - 5:00 pm

Integrating Image Data & Heads-Up Digitizing:

Section Objectives: At the conclusion of this section the user will be able to display geo-referenced images, digitize vector features and use them to create new spatial features. Exercise – Digitizing and creating new spatial features from image data

Creating a Mapping Project in ArcGIS:

Section Objectives: At the conclusion of this section the user will be able to create an ArcGIS Project from spatial data and conduct basic spatial analysis and thematic mapping using ArcGIS.

Exercise – Creating a project in ArcGIS

Lunch on your own

Exercise – Creating a project in ArcGIS

Exercise – Fire Planning at Sequoia-Kings Canyon Park

Day 2 - Friday, April 20 - 9:30 am - 4:00 pm

ArcGIS Data Capability Issues:

Section Objectives: At the conclusion of this section the user will be able to use ArcToolbox to import data from various sources into a format that is readily usable by ArcGIS. Exercise – ArcGIS Data Import and Capability Issues

Understanding Spatial Analyst:

Section Objectives: At the conclusion of this section the user will be able to use the ArcGIS Spatial Analyst extension to create new layers from raster data, analyze statistics generated from the data, and employ raster calculator to create new results. Exercise – Spatial Analysis

Lunch on your own

Using 3D Analyst to calculate volumes

Section Objectives: At the conclusion of this section the user will be able to use the ArcGIS 3D Analyst extension to calculate container volumes, make analyses based on data generated statistics and manipulate layer properties to visualize data in ArcScene. Exercise – 3D Analyst

Question and Discussion session and workshop evaluation.



## Intermediate to Advanced Topics in GIS for Natural Resource Professionals Deadline April 12, 2007

Name \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

GIS software and version you currently use: \_\_\_\_\_

Continuing Education Credits needed:

\_\_\_ Foresters                      \_\_\_ Landscape Architects

\_\_\_ Engineers/Surveyors      \_\_\_ Appraisers

## Method of Payment

**Registration Fee: \$495**

\_\_\_ Check payable to NC State University

\_\_\_ Credit Card (*MasterCard or Visa ONLY*)

Card #: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Name of Cardholder: \_\_\_\_\_

Credit Card billing address if different from above:

\_\_\_\_\_

Verification code on back of card: \_\_\_\_\_

**Fax w/credit card information 919-515-6883**

**or mail with payment to: FEOP-NCSU**

Campus Box 8003

Raleigh, NC 27695-8003