



# Advanced Topic GIS Workshops using Spatial Analyst

## Co-occurrence & Habitat Mapping

October 24, 2008 - 9am to 4pm

UNH, Durham, NH

December 11, 2008 - 9am to 4pm

Stonewall Farm, Keene, NH

### Software used:

ArcGIS 9.2, Spatial Analyst, Habitat Priority Planner, Landscape Fragmentation Tool

### Topics covered:

co-occurrence, habitat fragmentation & prioritization

**\$150 standard \$110 reduced**

### Skill level: Advanced Topics

This course covers the use of co-occurrence analysis for compositing a variety of data layers to make important natural resource and societal decisions. This workshop will also cover a variety of techniques for mapping and analyzing habitat types, including the Landscape Fragmentation tool developed at University of Connecticut and the Habitat Priority Planner developed by the NOAA Coastal Services Center. Will focus on land cover, conservation lands, conservation priority areas and the NH Wildlife Action Plan.

### Participants will learn to:

conduct simple and weighted co-occurrence analyses, make decisions about choosing layers and setting weighting factors, determine fragmentation patterns of habitats or land cover types, prioritize areas based on internal and external features, use NH Wildlife Action plan data in spatial analyses

## Getting to Know ModelBuilder

November 5, 2008 - 9am to 4pm

UNH, Durham, NH

### Software used:

ArcGIS 9.2, Spatial Analyst, ModelBuilder

### Topics covered:

creating, using and sharing models, automation of geoprocessing

**\$150 standard \$110 reduced**

### Skill level: Advanced Topics

This is a course that introduces ArcGIS users to the capabilities and uses of ModelBuilder. The course is designed to explore how ModelBuilder works and how models can be created, edited and used to automate repetitive tasks or to run more complex analyses. While ModelBuilder is relatively simple to use, it can be a bit confusing when first getting started. This class consists of instructional presentations and hands-on exercises.

### Participants will learn to:

use ModelBuilder to create and edit simple models, add data and connect geoprocessing tasks to input/output datasets, automate geoprocessing workflows, control data parameters and variables in models, add models as tools to ArcToolbox, make models generic (transferable to other users)

## Watershed Analysis

October 8th, 2008 - 9am to 4pm

NH Fish & Game, Concord, NH

### Software used:

ArcGIS 9.2, Spatial Analyst, ArcHydro

### Topics covered:

raster manipulation, watershed delineation  
buffer analysis, change analysis

**\$150 standard \$110 reduced**

### Skill level: Advanced Topics

This course is designed for natural resource professionals, planners, and volunteers, others who work at a regional or watershed level. Participants will learn how to use the ArcGIS Spatial Analyst extension to display and manipulate data such as the NH Land Cover, impervious surfaces, and Digital Elevation Models (DEMs). In addition to developing familiarity with these data layers, participants will learn how to apply these tools and data to watershed issues.

### Participants will learn to:

manipulate raster data using Spatial Analyst, delineate watershed using ArcHydro and DEMs, evaluate watershed condition using land cover, use impervious surface data to estimate land use change over time

## SPACE IS LIMITED - REGISTER EARLY

**Registration info:** Sharon at [sharon.hughes@unh.edu](mailto:sharon.hughes@unh.edu) or 603.862.1029

**Register online:** go to link <http://extension.unh.edu/GISGPS/GISGPS.htm> and click on "Register Now!", or look at What's New box in right pane

**For info on course content:** Shane at [sbradt@ceunh.unh.edu](mailto:sbradt@ceunh.unh.edu) or 603.862.4277

Note: If you have special needs that need accommodation, please contact us 3 weeks in advance of the program date. UNHCE is an equal opportunity educator and employer. University of New Hampshire, U.S. Department of Agriculture, and NH counties collaborating.

