Trip Report – ESRI User Conference 2004

This year's conference theme was "the language of geography" and included many technical workshops featuring the newly-released version 9 of the software. I chose to focus on two general areas of the technical workshops – Cartography and Geoprocessing Tools.

Cartography – I attended three valuable cartography workshops including "Basic Principles of Map Design", "Mapping Geographic Patterns", and "Creating Advanced Effects".

"Basic principles of map design" was loaded with tips for creating maps that are easy to read. Tips included finding the visual center of the page, color scheme choices, and advice to put nothing of importance in the upper left corner of a map. Also the ColorBrewer tool was recommended for guidance in color choices - http://www.personal.psu.edu/faculty/c/a/cab38/ColorBrewerBeta.html

(By the way, links off the ColorBrewer page provide very helpful guidance for using color schemes discernable to readers with color blindness.)

"Mapping geographic patterns" focused on manipulating the classification schemes under the ArcMap symbology properties and highlighted the Multivariate Renderer for displaying trends in using multiple variables. They also introduced a new set of tools for examining spatial patterns of vector data – cluster and "hot spot" analysis were demonstrated.

"Creating Advanced Effects" was presented by Aileen Buckley (formerly of OSU) and focused on enhancing the display of shaded relief grids. Two custom models (Swiss-style for a more subtle background display and the MDOW technique that incorporates multi-directional shading) were demonstrated utilizing the Model Builder. These models are set to be released soon – probably with the User Conference CD.

Geoprocessing Tools – ArcGIS version 9 has included a huge tool box full of analytical functionality that is easier to use than ever. Almost any GIS analysis is accomplished through a series of steps. A new feature of the software is the "model builder" that documents the steps of an analysis graphically with a diagram of the input data and processing tools. I attended three geoprocessing workshops including; "Introduction to Geoprocessing", "Scripting in ArcGIS", and "Spatial Statistics 101". Model builder was introduced in the "Introduction". Scripting showed how to extend the power of the model building with some simple programming steps. Spatial Stats introduced new tools for examining geographic pattern – tools that are built using the model builder.