A GIS tool for plant spatial pattern analysis

Yanli Zhang
*Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University*, zhangy2@sfasu.edu

Nathan Woodward

Daniel Unger
*Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University*, unger@sfasu.edu

I-Kuai Hung
*Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University*, hungi@sfasu.edu

Brian P. Oswald
*Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, Nacogdoches, Texas 75962*, boswald@sfasu.edu

See next page for additional authors

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Yanli Zhang, Nathan T. Woodward, Daniel Unger, I.-Kuai Hung, Brian P. Oswald, Kenneth W. Farrish

A GIS program, ArcPlantPattern, was developed with Visual Basic .NET and ArcObjects as an ArcGIS extension to assist the investigation of plant distribution patterns (species composition as occurrence probability and spacing as distances among species) and to design planting plan maps for patch planting. ArcPlantPattern is the first software of its kind. It can be used for arid and semiarid lands reclamation, burned area rehabilitation, or designing landscapes with a required plant community distribution. ArcPlantPattern may also be applicable to other spatial point pattern analysis, such as geology, geography and wildlife habitat.