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A GIS tool for plant spatial pattern analysis

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Repository Citation

Zhang, Yanli; Woodward, Nathan; Unger, Daniel; Hung, I-Kuai; Oswald, Brian P.; and Farrish, Kenneth W., "A GIS tool for plant spatial pattern analysis" (2011). *Faculty Publications*. 373.

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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.