

NINE YEARS OF VEGETATION CHANGES IN A REMNANT SAND PRAIRIE AND ADJOINING OLD-FIELD 24 TO 32 YEARS AFTER CULTIVATION ENDED.

***SUSAN J. KIRT, Department of Biological Sciences, Chicago State University, Chicago, IL 60628, USA**

The Cedar Hills Sand Prairie located near Cedar Falls, IA consists of a 14-hectare remnant sand prairie and an adjoining 22-hectare old-field of similar soil types. The adjoining old-field has been undergoing secondary succession to prairie with natural seed dispersion and minimal management since cultivation ended 1976. During the late summer of 2000, 2001, 2005, 2006 and 2008, the remnant and old-field vegetation was sampled for species, coverage and if the plant was reproducing (containing flowers or seed) along a 300 meter long transect (100 m in remnant and 200 in the old field). Over time, there has been an increase in the number and dominance of the native grass, sedge and forb species in the old-field that was not present in the 2000 and 2001 samples, especially in the region between 150 and 200 m north of the remnant prairie. Dominance of *Bromus inermis* and *Poa pratensis* in the sample sites increases with distance from the remnant, however following a drought in 2005 their dominance in the old field appears to have decreased, while at the same time *B. inermis* appeared more regularly in the remnant prairie. The change in the presence/ absence of plant species reproducing is also discussed. Secondary succession to native sand prairie vegetation is appears to still be in process in the old-field portions of the Cedar Hills Preserve.