# Land Use Impacts on Soil Physical and Morphological Properties in Northeastern Illinois. (S05-konen192511-Poster)

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### **Abstract:**

Four adjacent management areas in northeastern Illinois were examined in order to evaluate land use impacts on soil physical and morphological properties. The four management areas consisted of a never cultivated savanna and three agricultural fields that had been cultivated for approximately 140 years. The three agricultural fields were managed similarly until the mid 1980's when one of the fields was taken out of production and planted to switchgrass. A second agricultural field was converted to no-till in the early 1990's. The final agricultural field remains under conventional tillage practices. Seven backslope soil profiles were described and sampled within each management area. Soil micro and macro-morphological properties were compared as well as differences in taxonomic classification induced by land use. We also examined bulk density, infiltration rate, aggregate stability, and organic carbon concentration.

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