

Fire Induced Repellence in the North Dakota Badlands: Initial Year Observations. (S05-richardson095623-Oral)

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Abstract:

The purpose of this field project was to study the effects wildfires have on soil water repellency and watershed fluvial processes these are characteristic to the badlands region of southwestern North Dakota. Post fire examination revealed profoundly water repellent soils associated with burned juniper shrubs. No evidence erosion was observed on very steep hillslopes even after heavy rain. Gully formation and headward erosion of knickpoints in the valleys was noted associated with repellent soils. Non-repellent soils had aggrading valleys and hillslope erosion.

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Presentation Information:

Presentation Date: Monday, November 11, 2002

Presentation Time: 4:30 pm

Keywords:

water-repellency, fire-induced, erodibility, juniper