**Abstract**

Microbial communities are an important component of ecosystem health from a bottom-up perspective. In this study, we sought to understand the distribution of soil microbes as well as

their interactions with plants by quantifying spatial variation of soil microbes along a transect

intersecting a forested area, equine trail, and adjacent fallow pasture. We cultured bacteria from

soil samples collected in the Dows Prairie area of Mckinleyville and analyzed the effect of

distance from forest canopy to open pasture on observed bacterial colony abundance and

diversity. We expected higher microbial abundance and diversity in the forest than in the pasture,

but our results were in direct opposition, indicating that diversity was significantly higher in

pasture samples than in forest samples, as both richness and Shannon indices increased along our transect.