# Changes in Microbial Communities in Reciprocally Transplanted Soil from Meadows and Forests. (S07-myrold192453-Poster)

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## Abstract:

In September 2000, we established a reciprocal soil core transplant study at two sites (Carpenter and Lookout) at the H.J. Andrews Experimental Forest located in the Cascade Mountains of central Oregon. Each site had adjacent areas of high-elevation forest and meadow. At each site, soil cores from the meadow were either kept in the meadow or transferred to the adjacent forest site; the same was done for soil cores from the forest. Half of the cores were enclosed in PVC pipe to limit root in growth, half were placed in mesh bags to allow root in growth. Our first complete sampling was done in September 2001. We used PCR-based methods to measure the composition of the total bacterial community (16S rDNA), and communities of ammonia-oxidizing (amoA) and denitrifying (nosZ) bacteria. After one year, transplanted cores were beginning to assume the characteristics of their new location; however, we observed no differences between open and closed cores. Microbial communities were relatively responsive to changes in environment, but were less affected by root in growth one year following treatment at these high-elevation sites.

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