



Life is not fair. Some areas receive ample resources, while other areas are more depleted. We tested how resource inequity affects model grassland ecosystems, and whether association with mycorrhizal mutualists can facilitate resource distribution and mediate the consequences of inequity. We conceptually subdivided each of 12 EcoUnit landscapes into 25 subplots, and experimentally manipulated the spatial distribution of three macronutrient resources: nitrogen (N), phosphorus (P), and potassium (K). In experimental landscapes where inequity was highest, one of the 25 subplots received all of the NPK resources and 24 of the subplots received no subsidy. In the experimental landscapes where inequity was low, each of the 25 subplots received homogeneous NPK nutrient subsidies. We are currently analyzing the consequences of resource inequity and mycorrhizal associations for distribution of nutrients, as well as magnitude and stability of responses by the plant and soil communities (microbial biomass, respiration, microbial diversity, soil fauna activity).