

ECOLOGY – POSTER #27

**Soil and climate along two elevational transects in the eastern Great Basin and northern Mojave Desert of Nevada**

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This study examines the climate, soil type, and soil nutrient properties along two elevational transects in Nevada. These sites correspond to the NevCAN infrastructure. Thirteen sites were sampled in total, eight in the eastern Great Basin and four in the northern Mojave Desert of Nevada. The northern sites include five western slope locations spanning environments from salt desert to bristlecone pine forest and three eastern slope locations ranging from subalpine mixed forest to salt desert. The southern transect contains four locations extending from montane to Mojave desert shrub. Samples were taken from interspace areas (n=3) at two depths (0-10 cm and 10-30 cm). The soil nutrients showed significant relationships between pH and precipitation, NH<sub>4</sub>-N and elevation (including the factors that vary with elevation such as air and soil temperature, precipitation, VPD, and snow cover), P and precipitation, Mg and elevation and precipitation, and K and aridity. There were also several nutrients that covaried within the sites including SO<sub>4</sub>-S, Ca, Mg, K, and C:N. Future work includes examining the effects of vegetation on these soil nutrients at each site.