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*GEYSER SPRING: A Further Characterization Of Colorado's Only Geyser*

In 2007, I characterized physical and chemical characteristics of Geysers Spring to determine if they influenced the aerobic microbial community in the geysers. There was no dissolved O<sub>2</sub> in the geysers water so this year I expanded the microbial studies to test for anaerobes. Results showed more total kinds of aerobic microbial colonies in the stream than in the geysers water. More total kinds of anaerobic colonies were found in the geysers, both facultative and obligative. The stream only contained facultative anaerobes. More types of microbes survived in the geysers water because the geysers provides a broad base of nutrient resources and variable physical characteristics. Statistical information provided by an engineer led to looking at the chemical and physical features of a privately owned hot springs two miles down slope of Geysers Spring. These were compared to those of Geysers Spring to investigate if both these geothermal features arise from the same hydrological source, as well as geothermal source as noted in the literature. The water quality characteristics of the hot springs were different than those of Geysers Spring. Likely the water at the hot springs goes through different substrates and mixes with other water as it rises to the surface. The geysers and the hot springs have different physical characteristics which can affect water quality. I think Geysers Spring and Paradise Hot Springs are part of a geothermal complex and are interrelated. These connections merit further investigation because the ecology of one system can influence the ecology of the other.