Fire effects on plant and lichen diversity across fire regimes

A virtual lecture presented by

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Abstract: In many global ecosystems, wildfires are becoming larger, more frequent, and / or more severe. However, the impacts of altered fire regimes for the biodiversity of understory plants and lichens remains incompletely understood. Most previous studies focus on small geographic areas, making it difficult to generalize how plant and lichen responses to fire vary across gradients of environmental conditions and historical fire regimes. In this talk, I will discuss recent research exploring post-fire plant and lichen communities across numerous wildfires that span substantial ecological gradients, using multiple approaches to characterize both fire effects (e.g., local and landscape-scale fire severity) and plant and lichen communities (e.g., phylogenetic diversity, dispersal strategies, and taxonomic diversity).

Bio: Jesse Miller is an ecologist who is interested in the effects of global change factors such as altered fire regimes on plant and lichen communities. He worked as a botanist and ecologist for several years prior to completing his Ph.D. at the University of Wisconsin-Madison in 2016, where he studied the effects of habitat connectivity on Ozark grassland plant communities. He is currently a lecturer at Stanford, where he teaches ecology classes, including inquiry-based courses that engage undergraduates in real world ecological research. Jesse loves sharing his passion for the natural world with others. Contact: jedmiller@ucdavis.edu.