"Controls on fire patterns at different scales of space and time: Small steps toward pyrogeography"

A Geography Colloquium presentation by

Dr. Max A. Moritz

Thursday, January 27, 2011: 1940 Buchanan, 3:30–4:45 pm

Abstract:

There is increasing concern over how climate change may alter fire activity in different regions of the world. At the same time, we grapple with local legacies of fire suppression, grazing, logging, and/or urban encroachment into previously wild landscapes. What constitutes the "natural" fire regime of different ecosystems is often a subject of great debate, and how to restore such processes can hinge on understanding how they operate. Many of the scientific questions about fire and what drives/constrains it are spatial in nature, making them inherently interesting from a geographic perspective. In this seminar, I will attempt to review some of the current thinking about what controls fire at different scales of space and time, drawing largely from my own research since leaving the Geography Department at UCSB a decade ago. Examples will range from studies of past fire in the chaparral of our own region up to what global projections can tell us about fire activity under altered future climates.

Bio:

Dr. Moritz is a Cooperative Extension Specialist and Associate Professor in the Division of Ecosystem Sciences in the Department of Environmental Science, Policy, and Management at the University of California, Berkeley. He has taught many courses, including physical geography and climatology and seminars on fire ecology. He was also the founder and co-director of the Center for Fire Research and Outreach for 5 years: “Much of my research is focused on understanding the dynamics of fire regimes at relatively broad scales and using this information in ecosystem management. I have employed quantitative analyses of fire history, examining the relative importance of different mechanisms that drive fire patterns on the landscape. I am also interested in simulation of fire dynamics, using spatially-explicit models of fire spread and vegetation regrowth.”