

# BayCEER Kolloquium

Lectures in Ecology and  
Environmental Research

Summer 2019



UNIVERSITÄT  
BAYREUTH

Thursday

**18.07.2019**

**12:00 in H6, GEO**

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# Burning pixels, points, and polygons: The role of spatial data in wildfire research and management in the US

Wildfire presents a mix of challenges and opportunities for land management agencies in the United States. Many North American ecosystems evolved with fire as a natural part of their long-term ecological dynamics, and fire often plays a necessary role in regenerating vegetation and cycling nutrients. But wildfire also is a significant threat to life and property and is becoming increasingly destructive due to a mix of factors including climate change, expansion of developed areas, and a century of land management policies that attempted to exclude wildfire. The National Cohesive Wildland Fire Management Strategy, initiated in 2009, created a vision for how to meet these challenges of wildfire management. The Cohesive Strategy emphasized three primary goals: 1) restore and maintain resilient landscapes, 2) create fire adapted communities, and 3) promote safe and effective wildfire response. In this presentation, I will discuss how wildfire research in the U.S. Forest Service is helping to address these goals. I will give some background about the U.S. Forest Service, and research programs at the Missoula Fire Sciences Lab, where I have been a geospatial analyst for the past 15 years. I will discuss the critical importance of spatial data in helping us to better understand the potential for wildfire in different landscapes and under different scenarios.