

Spatial Analysis of Surrounding Landownership and Access to National Park Service Units in California

The goal of the summer research is to finish compiling and begin analyzing landownership, land use and land cover, census, and crime data for counties abutting National Park Service (NPS) units, as well as to standardize NPS road and trail data for analysis. The student will be trained in GIS skills commensurate with her experience and will participate in the analysis and visualization of these data in concert with other park-level statistics such as visitation, staffing, etc. I hope to complete a database of neighborhood and park-level metrics that can be used to analyze differences in land cover trajectories across years and NPS units.



Jenny Palomino
Ph.D. Candidate, Environmental
Science, Policy and Management

I am a Ph.D. candidate, specializing in the development of geospatial tools for environmental and ecological applications. My dissertation focuses on how landscapes within National Park Service (NPS) units in California are influenced by surrounding areas. There are many spatial datasets critical to understanding these dynamics, including access (e.g., roads and trails entering park units), adjacent landownership and land use (e.g., public/private, size), and biogeographic characteristics of the parks.

While I have worked with many undergraduates, I have not had formal experience as a mentor, and I look forward to strengthening my skills through the SMART program experience.



Shane Fairchild
B.A., May 3015
Conservation Resource Studies

I am a spring 2015 graduate of the College of Natural Resources. I have been a longstanding advocate for conserving and protecting our National Park system and am excited to be a part of a project that is focusing on the influence of different types of land use on nearby national parks.

I am applying to graduate school for a Master's in Geographic Information Science this summer and hope to start graduate studies in spring 2016.

UC Berkeley's Student Mentoring And Research Team (SMART) is a paid professional development program that engages doctoral students in creating mentored research opportunities conducted with selected undergraduate student mentees during a ten-week period over the summer. Both participants receive compensation and training throughout their participation. SMART broadens the professional development of doctoral students and fosters research skills and paths to advanced studies for undergraduates.

Expenses associated with each team total \$10,000 000 (\$5K graduate stipend/ \$3.5K undergrad stipend/\$1.5K research and conference costs). As a donor-supported program of the Graduate Division, the majority of teams are underwritten through a combination of donor funds paired with matching support courtesy of the Graduate Division.

Learn more at smart.berkeley.edu