**Pacific Crest Trail Mega-Transect**

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At the International Congress for Conservation Biology in Montpellier, France, I presented my research using the Pacific Crest National Scenic Trail (PCT) as a mega-transect to survey and monitor biodiversity on the Pacific cordillera. This work stems from my dissertation research. My wife and I hiked the length of the PCT in California in a single field season (2,700 km) over about 5 months; this is two-thirds the total length of the PCT from Mexico to Canada (4,260 km). We counted birds and rapidly assessed habitat at 3,578 sites along the PCT in California from Mexico to the Oregon border. We stopped every 10-mins of hiking, about every 500 to 700 meters, and counted all birds seen and heard and rapidly assessed the habitat at each site. We completed this work in a single 5-month season. I am now collaborating Dr. Brett Furnas with California Department of Fish and Wildlife on this PCT Mega-Transect. I am building collaborative relationships with other universities and working to build an undergraduate research and student exchange program at William Jessup University (Rocklin, California), where undergraduate students will participate in all aspects of the PCT Mega-transect form logistics and planning, field work, analyzing the data, and write-up and publication of the results. I have since resurveyed large sections of the PCT in cooperation with California Dept. of Fish and Wildlife in 2010 and 2015 and we plan to do more work in 2016.  Our methods include the use of automated bird recorders and we are expanding surveys to other taxa, including aquatic vertebrates. The aquatic vertebrate surveys involves environmental DNA techniques by collecting samples of DNA left in the aquatic environment wherever the PCT intersects a stream or lake. The goal of the project is to complete a mega-transect survey from Mexico to Canada and to monitor and track changes in biodiversity on the Pacific cordillera in response to climate and human land use change.