

Postdoctoral Opportunity – Hierarchical modeling of avian point count data from western national parks

12-mo. position available beginning in January to analyze avian point count data from Mount Rainier, Olympic, North Cascades, Sequoia and Kings Canyon, and Yosemite National Parks. Objectives include a) reporting on short-term population trends using an existing analytical methodology that involves distance sampling and temporal trend assessment for individual transects in a stratified sampling framework, and b) developing a new analytical framework for the data that is based on hierarchical models with parameter estimation using frequentist and/or Bayesian Markov chain Monte Carlo (MCMC) methods. The new framework will take advantage of aspects of the data set that are currently unexploited (replication within and among years), and provide inferences about a range of population parameters, detection probabilities, and their relationships to environmental covariates. The analyst will have broad latitude to explore and publish findings on habitat relationships of western montane landbirds, and patterns in avian diversity and abundance across the parks, using a dataset comprising thousands of point count surveys.

The successful candidate will be employed by The Institute for Bird Populations (IBP; www.birdpop.org) based in Point Reyes Station, CA and will work under the supervision of IBP Research Ecologist Jim Saracco and Executive Director Rodney Siegel, in collaboration with USGS and NPS scientists.

Duty location is flexible and may be remote. To apply, send cover letter outlining relevant experience, CV, and contact information for 3 references to Rodney Siegel at rsiegel@birdpop.org by November 3.