Postdoctoral Fellow
Wildlife Biosurveillance – Tracking Bats and Coronaviruses: Modeling Bat Distributions and Abundance

COLORADO COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT IN THE DEPARTMENT OF FISH, WILDLIFE, AND CONSERVATION BIOLOGY, COLORADO STATE UNIVERSITY, AND
NORTH AMERICAN BAT MONITORING PROGRAM, USGS FORT COLLINS SCIENCE CENTER

POSITION TITLE: Post-doctoral Fellow
SALARY: $58,500-$62,500 per year, plus benefits.
PERFORMANCE PERIOD: 24 months after start date, anticipate January 2022-December 2024, with additional years possible
APPLICATION DEADLINE: 5 December 2021

POSITION SUMMARY:

Colorado State University is seeking candidates for a postdoctoral position to conduct research on bat distribution and population dynamics, in response to disease progression, in support of the North American Bat Monitoring Program (NABat). The postdoc will combine data on coronaviruses and other pathogens from disease surveillance programs with data on bat occurrence and local activity/abundance data from the NABat to develop models of disease occurrence, local scale population dynamics of wintering bats in response to disease progression, summer bat distributions as a function of winter population disease dynamics, and the relative importance of winter roosts to long-term population persistence.

The primary objectives for this post-doctoral position are: 1) develop an extensible modeling framework that can be applied to understand the progression of bat related diseases based on biosurveillance data; 2) evaluate linkages between changes in winter bat populations and the distribution of bats on the summer landscape.; 3) identify winter bat populations to target for conservation action (e.g., vaccination, cave gating, and habitat manipulation) by leveraging metapopulation theory and measured variation among annual estimates of local abundance from winter hibernacula; 4) coordinate with other project partners to optimize sampling efforts across regions, ensure consistency across data collection efforts, and support timely delivery of results; and work closely with NABat staff to manage bat and disease related data.

The postdoc will work closely with the Project Leads at Colorado State University and the NABat team at the USGS Fort Collins Science Center. There will also be opportunities to work with the Project Leads on a variety of related projects of interest.

DUTIES:

The post-doctoral fellow will be primarily supervised by Dr. Bill Kendall at the USGS Colorado Cooperative Fish and Wildlife Research Unit, at Colorado State University. The incumbent will also work closely with Dr. Brian Reichert (NABat Coordinator, USGS Fort Collins Science
Center and NABat contributing data partners. The postdoc position will be co-located at Colorado State University and USGS Fort Collins Science Center in Fort Collins, Colorado.

MINIMUM REQUIREMENTS:

1. Ph.D. in conservation science, ecology, natural resources, statistics, or a related discipline.
2. Expertise in the principles and methods of wildlife monitoring and statistical methods used for modeling the distribution and dynamics of populations.
3. Demonstrated proficiency with statistical software including R
4. Demonstrated evidence of excellent written and oral communication skills.
5. Desire and proficiency to publish in the peer-reviewed literature.

DESIRED ABILITIES:

Competitive candidates will have a background in demographic estimation, population modeling, and occupancy modeling that account for multiple sources of uncertainty, knowledge of disease ecology, and knowledge of bat population biology. Experience with WinBUGs, JAGS, or STAN software is desirable. The successful candidate should have experience working collaboratively in groups.

TO APPLY:

To apply and view a full position announcement please visit: https://jobs.colostate.edu/postings/95428 by December 5th, 2021, 11:59 pm (MT) for full consideration.

CSU is an EO/EA/AA employer and conducts background checks on all final candidates.

For further information, contact: Bill Kendall (William.Kendall@colostate.edu) or Brian Reichert (reichert@usgs.gov).