

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Dynamics of Endemic White-Nose Syndrome in Bats: Characterizing Survivorship in the Eastern U.S

Discipline: Natural
Type of Project: Research
Funding Agency: USGS
Other Partners/Cooperators: Colorado State University
Student Participation:
Effective Dates: 08/01/2016 - 07/31/2021
Funding Amount: \$23,500.00

Investigators and Agency Representative:

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Project Abstract: This project is a pilot study to begin evaluation for four different objectives: 1) Describe the spatial distribution within hibernacula where bats hibernated pre-WNS and where survivors are currently hibernating in relation to microclimate and fungal presence; 2) gather microclimate data in past and present hibernation sites then develop a spatial model that predicts and identifies survival spaces where bats can successfully survive hibernation despite fungal presence; 3) develop genetic techniques to determine whether bats are returning to the same hibernacula and persisting or if apparent remnant populations are actually new immigrants still subject to WNS mortality; and 4) use genetic relatedness of affected populations within endemic zones to investigate if environmental factors are driving mortality, versus the potential for heritable host-specific traits.

Keywords: White-Nose Syndrome, bats, survivorship, eastern US, USGS, Colorado State University