

**Project Summary**  
**Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title: Statistical Support for Survey Effort Required for Occupancy Modeling**

**Discipline:** Natural  
**Type of Project:** Technical Assistance  
**Funding Agency:** USGS  
**Other Partners/Cooperators:** Montana State University  
**Students Involvement:**  
**Effective Dates:** 6/1/2015 - 5/31/2020  
**Funding Amount:** \$44,603

**Investigators and Agency Representative:**

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**Project Abstract:** The goal of the research is to provide statistical assistance for sampling design development and recommendations on statistical methods for estimating status and trends in a robust and sound manner. The objective is to collaborate in various tasks stemming from the overarching need for robust statistical inferences based on long-term monitoring data; and routine data analysis and visualization of probabilistically sampled data. In addition, simulation studies may be conducted to explore trade-offs in survey effort within an occupancy modeling framework.

**Keywords:** Statistical support, data monitoring, data analysis, occupancy modeling, USGS, Montana State University, Bozeman