SIERRA MCMURRY

(530) 575-1591 • stmcmurr@ncsu.edu

EDUCATION

Bachelor of Science from The University of Montana, Cum Laude
• Major: Wildlife Biology
• Overall GPA at University: 3.45
• Dean's List

Associates of Science from Sierra College
• Two Associates Degrees: Natural Science and Biological Sciences
• Overall GPA at College: 3.6
• Dean's List

PUBLICATIONS, RESEARCH EXPERIENCE, AND PRESENTATIONS

Peer-reviewed publications
McMurry, S., J. Goerz, A. Moeller, H. Robinson. 2022. Using Space-To-Event Modeling to Estimate Density of Multiple Species in Northeastern Washington. *Wildlife Society Bulletin*. https://doi.org/10.1002/wsb.1390

• This research used camera trap data from northeastern Washington and a novel statistical method called Space-To-Event to estimate densities of five unmarked populations of focal species, including white-tailed deer, moose, mountain lion, wolf, and black bear.

Technical Reports
Hanlon, J. and **McMurry, S.** July 2022. Snake Butte Bison Count Pilot Project, Bison Count Report. Submitted to Island Mountain Development Group and Fort Belknap.

Professional Presentation
McMurry, S. Finding Evidence for Competition in Moose, Deer, and Cougar Using Space-to-Event Model, UMCUR 2019, presented at University of Montana Conference on Undergraduate Research.

RELEVANT WORK EXPERIENCE

Research Assistant, PhD Student, North Carolina State University, Kays Lab
August 2023-Current
• Currently working on a project looking at how mast impacts mammal communities across North America, using camera trap data.

Animal Technician, Animal Encounters Exhibit at Fort Collins Museum of Discovery
September 2022-February 2023
• Assisting in care, husbandry, and enrichment of 26 species including mammals, reptiles, amphibians and arthropods.
• Following safety procedures when handling and caring for highly venomous arthropods and reptiles.
• Educating the public on species conservation, animal care, and environmental conservation.

Undergrad and Post-bac researcher, Robinson Lab, University of Montana
October 2018-November 2022
• Research lead on population density and monitoring study of large mammal species in northeastern Washington.
• Experience teaching and leading 13 interns on how to identify various large mammal species down to sex and age when possible, in camera trap data. Additionally, I developed a data management procedural manual for all interns.

• Collaborated with Washington Department of Fish and Wildlife's state biologists, sectional director and other important stakeholders.

Data Analyst and Project Co-Advisor, Bison Monitoring Project for Fort Belknap Indian Reservation
July 2022-August 2022 (Seasonal)
• Advised biologists and land managers on proper data collection protocol and co-creating the future management plan for American plains bison on the reservation.
• Organized and analyzed drone imaging data in program R, including aerial survey counts and population monitoring of calves.

Bat Research Field Technician, Tetra Tech
May 2019-May 2022
• Conducted multi-species bat capture using mist nets to study migration, diet, disease, roost selection and emergence behavior on MPG Ranch in Florence, MT.
• Tagged silver hair and hoary bats with pit tags and Motus tags to track and monitor movement and survival.
• Used radio telemetry to track bat roost patterns and perform emergence count surveys using a Pit Tag Reader, FLIR, and the Anabat Passive Bat Detector to observe emergence and flying behavior.

Field Technician, Mountain Lion Project, MPG Ranch
November 2019-March 2020 (Seasonal)
• Conducted line transect surveys for mountain lion tracks and forward/backtracked those tracks taking fecal and hair samples.
• Set up camera traps on kill sites and random point locations.
• Data entry in Excel, Google Earth, and GIS.

Biological Field Intern, Santa Cruz Puma Project
June 2017 to March 2018
• Assisted in mountain lion capture in Santa Cruz, CA using dart gun immobilization, cage captures, radio telemetry and hound tracking.
• Monitored mountain lion vitals during immobilization, along with taking DNA samples.
• Tissue and fecal sampling, carcass handling, infectious disease protocol, intermediate autopsy skills
• Located and navigated to randomly selected points with a GPS to set up camera traps and retrieve camera data.

Lab Intern, Santa Cruz Plant Sciences Lab
June 2016 to December 2017
• Assisted a Ph.D. student studying evolutionary behavior in native California plant species.
• Sampled from dry vegetation data in the lab and extracted seed pods from native plants at all life stages.
• Data entry and minor analysis of vegetation data using Excel.

Biological Field Intern and Data Entry Technician, Annapurna Leopard Conservation Project, Ghandruk, Nepal
June 2016 - August 2016 (Seasonal)
• Assisted in setting up and collecting camera trap data targeting leopards in the Himalayas for leopard population abundance surveys for the Annapurna Conservation Trust.
• Observed and recorded behavioral observations of leopards from camera trap data using Excel and R.

Biological Field Intern and Data Entry Technician, Loiborsoit Poaching Project, Tanzania, Africa
July 2014 - August 2014
• Performed transect game species surveys and conducted behavioral and poaching observation surveys.
• Developed their website and entered and organized data in Excel.