

Kate McGinn

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EDUCATION

In Progress: PhD in Forest and Wildlife Ecology
University of Wisconsin-Madison

August 2019-present

Bachelor of Arts in Organismal Biology and Ecology
Colorado College
GPA: 3.96 Magna Cum Laude
GRE: Quantitative 168 (94%) and Verbal 162 (91%)

May 2018

RESEARCH

Fine scale climate vulnerability of California Spotted owls

present

University of Wisconsin-Madison

Principle Investigators: Drs. Zachary Peery, Jonathan Pauli, and Ben Zuckerberg

- Analysis on buffering capacity of microclimates utilized by spotted owls
- Physiologic study on field metabolic rates in individuals across elevational gradient

Co-existence of forest owls in the Sierra Nevada

present

University of Wisconsin-Madison

Principle Investigator: Dr. Zachary Peery

- Utilize neural network to extract forest owl communities from acoustic dataset
- Occupancy analysis on acoustic detections

Resource selection and habitat use by breeding Flammulated owls

2017-2019

Colorado College

Principle Investigator: Dr. Brian Linkhart

- Tagged individuals for GPS tracking during breeding season
- Sample habitat characteristics using point-quarter method and ground cover transects
- Apply resource selection functions, step selection functions, and kernel density analyses to spatial data

Migratory strategies of Flammulated owls

2016-2019

Colorado College

Principle Investigator: Dr. Brian Linkhart

- Deploy geolocators and GPS devices to track owl migrations
- Utilize quantitative methods and geographic information systems to estimate routes and timing
- Collaborate with ecologists in Mexico to study interactions between migratory and resident individuals

PROFESSIONAL EXPERIENCE

Research Assistant

present

Department of Forest and Wildlife Ecology, University of Wisconsin-Madison

- Large-scale acoustic monitoring project in the Sierra Nevada

Paraprofessional**May 2018-May 2020**

Department of Organismal Biology and Ecology, Colorado College

- Work with professors to lead field trips, tutor students, run labs and dissections
- Facilitate student thesis projects and presentations
- Establish R coding club for Biology and Environmental Science students

Field Technician**May 2016-August 2018**

Colorado College

- Worked on long-term Flammulated owl demography project
- Captured, handled, and processed adults and nestlings
- Crew leader in 2018; taught skills to new technicians

TEACHING

Biology/Ecology Tutor**August 2016-May 2018**

Department of Organismal Biology and Ecology, Colorado College

- Conducted review sessions with introductory classes in biology and ecology
- Worked individually with students to review for quizzes and exams

Learning Assistant**May 2017-May 2018**

Quantitative Reasoning Center, Colorado College Spring 2018

- Aided professor in biostatistics course, offering support to students and graders
- Held problem sessions every afternoon to work with students one-on-one and in groups

HONORS and GRANTS

Graduate Research Fellowship Program (National Science Foundation)**Spring 2020 - *present***

- Recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines

The Mary Alice Hamilton Award**May 2018**

- Award granted to the top graduating Organismal Biology and Ecology major

Denver Field Ornithologists Research Grant**May 2017**

- Funding for GPS tracking devices to study habitat selection and migration

PROFESSIONAL SKILLS

Computational Experience

- Proficiency using statistical program “R” and geographic information systems (GIS)
- Skillset in biostatistical analyses and experience in spatial statistics
- Experience in Github, HTML, and Python

Field Experience

- Proficient in capturing, handling, processing and drawing blood from small forest owls
- Experience participating in capturing, handling, and processing California spotted owls
- Experience injecting and drawing blood from spotted owls
- Field techniques in avian mist-netting, capture poles, snare poles, and hand captures

PRESENTATIONS

McGinn, K.A., Eisaguirre, J.M., and Linkhart, B. D. *Temporal changes in Flammulated owl (*Psilosops flammeolus*) habitat use in Colorado*. Poster presentation delivered at the Raptor Research Foundation Conference, Salt Lake City, UT, November 2017.

McGinn, K.A. and Linkhart, B.D. *Spatial behaviors by breeding Flammulated Owls (*Psilosops flammeolus*) in Colorado*. Oral Presentation at Colorado College's annual Organismal Biology and Ecology meeting, Colorado Springs, CO, March, 2018.

McGinn, K.A. and Linkhart, B.D. *Spatiotemporal habitat selection by Flammulated Owls (*Psilosops flammeolus*)*. Oral Presentation at Colorado Springs Undergraduate Research Forum. Colorado Springs, CO, May 2018.

Cockerham, J., **McGinn, K.**, and Du, I. *Modeling the 2017-2018 Flu Season*. Poster Presentation at Colorado Springs Undergraduate Research Forum. Colorado Springs, CO, May 2018.

PUBLICATIONS

Atuo, F., Jones, G., Hobbart, B., **McGinn, K.**, Tempel, D., Whitmore, S., Berigan, W., Gutierrez, R., Peery, Z. *In Review* Non-ideal colonization decouples measures of territory quality. *Journal of Animal Ecology*.

McGinn, K.A., Eisaguirre, J.M., and Linkhart, B. D. *In Progress*. Temporal patterns in habitat selection in breeding Flammulated owls. *Journal of Field Ornithology*.