**Dr. Kelsey B. McCune**  kelseybmccune@gmail.com

Max Planck Institute for Evolutionary Anthropology and the University of California Santa Barbara Institute for Social, Behavioral and Economic Research

I am a postdoctoral researcher studying consistent individual differences in wildlife to understand changes in behavior, ecology and disease dynamics resulting from the altered selection pressures in our human-dominated world.

**EDUCATION**

**Ph.D.** in Animal Behavior

 “Testing the relationship between social behavior and the evolution of cognition in two species of jay”

The University of Washington, Seattle (October 2012- June 2018)

Advised by Renee Ha, Ph.D.

**B.S.** *magna cum laude* in Biology, minors in Chemistry and Spanish

Randolph-Macon Woman’s College, Lynchburg, Virginia (August 2006 – May 2010)

Advised by Ron Gettinger, Ph.D.

**PUBLICATIONS**

**+** = undergraduate co-author

\*\* = Publication of the peer-reviewed preregistration

Jo HI+, Jablonski P, Lee S, **McCune KB**. Long-term memory of a complex foraging problem in jays. *In prep.*

Andreína Pacheco M, Ferreira FC, Logan CJ, **McCune KB,** MacPherson M, Miranda SA, Santiago-Alarcon D, Escalante AA. 2022. Great-tailed grackles (*Quiscalus mexicanus*) as a tolerant host of avian malaria parasites. *In review at PLOS ONE.*

\*\*Logan CJ, Blaisdell AP, Johnson-Ulrich Z, Lukas D, MacPherson M, Seitz B, Sevchik A**+**, **McCune KB**. 2022. [Behavioral flexibility is manipulatable and it improves flexibility and problem solving in a new context.](https://ecoevorxiv.org/5z8xs/) *Submitted to Peer Community In (PCI) Ecology.*

**McCune KB**, Valente JJ, Jablonski P, Lee S, Ha RR. 2022. Social behavior mediates the use of social and personal information in wild jays. *Scientific Reports* 12(2494):1-11*.*

\*\*Logan CJ, **McCune KB**, MacPherson M, Johnson-Ulrich Z, Rowney C, Seitz B, Blaisdell AP, Deffner D, Wascher CAF. 2022. Are the more flexible individuals also better at inhibition? *Animal Behavior & Cognition* 9(1):14-36*.*

\*\*Sevchik A**+**, Logan CJ, **McCune KB**, Blackwell A, Rowney C & Lukas D. 2022. Investigating sex differences in genetic relatedness in great-tailed grackles in Tempe, Arizona to infer potential sex biases in dispersal. *Animal Behavior & Cognition* 9(1):37-52*.*

Seitz BM, **McCune KB**, MacPherson M, Bergeron LM, Blaisdell A, Logan CJ. 2020. Using touchscreen equipped operant chambers to study comparative cognition. Benefits, limitations, and advice. *PLOS ONE* 16(2): e0246446. <https://doi.org/10.1371/journal.pone.0246446>.

Valente JJ, **McCune KB**, Tamulonis R, Fischer R. 2019. Removal pattern mitigates negative, short-term effects of stepwise Russian olive eradication on breeding birds. *Ecosphere* 10(5):1-18*,* [https://doi.org/﻿10.1002/ecs2.2756](https://doi.org/%EF%BB%BF10.1002/ecs2.2756).

**McCune KB**, Jablonski P, Lee S, Ha RR. 2019. Captive jays exhibit reduced problem-solving performance compared to wild conspecifics. *Royal Society Open Science* 6:181311, <https://doi.org/10.1098/rsos.181311>.

**McCune KB**, Jablonski P, Lee S, Ha RR. 2018. Evidence for personality conformity, not social niche specialization in social jays. *Behavioral Ecology* 29(4):910-917, <https://doi.org/10.1093/beheco/ary055>.

**McCune KB** 2016*.* Mexican Jays (*Aphelocoma wollweberi*) prey on bats in Arizona. *The Southwestern Naturalist* 62(1):146-148, <https://doi.org/10.1894/0038-4909-61.2.146>.

**PEER-REVIEWED PREREGISTRATIONS**

As part of the publishing ethics of my postdoctoral position on the Grackle Project, we preregister and receive peer-review on our experiments before collecting or analyzing the data to increase research validity and replicability, as well as to decrease occurrence of p-hacking and HARKing.

**McCune KB**, Ross C, LeGrande-Rolls C, Folsom M, Bergeron L, Logan CJ. In principle acceptance 2020. [Does space use behavior relate to exploration in a species that is rapidly expanding its geographic range?](http://corinalogan.com/Preregistrations/gspaceuse.html)  Pre-study peer reviewed at PCI Ecology ([review history](https://ecology.peercommunityin.org/public/rec?id=75&reviews=True)).

Logan CJ, **McCune KB,** Marfori Z, LeGrande-Rolls C, Chen N, Lukas D. In principal acceptance 2020. [Implementing a rapid geographic range expansion: the role of behavior and habitat changes](http://corinalogan.com/Preregistrations/gxpopbehaviorhabitat.html). Pre-study peer reviewed at PCI Ecology ([review history](https://ecology.peercommunityin.org/articles/rec?id=98)).

Berens JM**+**, Logan CJ, Folsom M, Sevchik A**+**, Bergeron L, **McCune KB**. 2022. Validating morphological condition indices and their relationship with reproductive success in great-tailed grackles. [Posted to EcoEvoRxiv](https://ecoevorxiv.org/857gt/) (25 July 2021).

**McCune KB**, Rowney C, Bergeron LB, Folsom M, Logan CJ. In principal acceptance 2019. [Is behavioral flexibility linked with exploration, but not boldness, persistence, or motor diversity?](http://corinalogan.com/Preregistrations/g_exploration.html) Pre-study peer reviewed at PCI Ecology ([review history](https://ecology.peercommunityin.org/public/rec?id=29&reviews=True)).

Logan CJ, Lukas D, LeGrande-Rolls C, Bergeron L, Folsom M, Marfori Z, **McCune KB**. In principal acceptance 2019.  [Is behavioral flexibility related to foraging and social behavior in a rapidly expanding species?](http://corinalogan.com/Preregistrations/g_flexforaging.html)  Pre-study peer reviewed at PCI Ecology ([review history](https://ecology.peercommunityin.org/public/rec?id=35&reviews=True)).

**McCune KB**, McElreath R, Logan CJ. In principal acceptance 2019. [Investigating the use of learning mechanisms in a species that is rapidly expanding its geographic range](http://corinalogan.com/Preregistrations/g_sociallearning.html). Pre-study peer reviewed at *PCI Ecology* ([review history](https://ecology.peercommunityin.org/public/rec?id=60&reviews=True)).

**FELLOWSHIPS AND GRANTS**

2017 National Science Foundation Graduate Research Internship Program

(NSF GRIP) at the Smithsonian Conservation Biology Institute $5,000

2017 University of Washington (UW), Alcor Fellowship $5,000

2017 UW Bolles Fellowship $500

2016 American Ornithologists’ Union Travel Grant $265

2016 UW Graduate and Professional Student Senate Travel Grant $300

2016 Crater Lake Science and Learning Center Student Fellowship $3,849

2013 NSF Graduate Research Fellowship Program $96,000

2013 Alan E. Leviton AAAS, Pacific Division Student Research Grant $736

2010 Ann Grant Gerhardt Scholarship, Randolph-Macon Woman’s College $200

2010 Grace Taylor Wiltshire HA Grant, Randolph-Macon Woman’s College $300

2009 NSF Research Experience for Undergraduates at Indiana University

Center for Integrative Study of Animal Behavior $5,000

**ACADEMIC AND RESEARCH POSITIONS**

Oct 2018-Present Postdoctoral scholar on The Grackle Project, UCSB & MPI

* “Behavioral and physiological mechanisms for invasion success in great-tailed grackles”
* Developed experiments for grackles in aviaries and the wild including: personality assessments such as measuring boldness as the response to a taxidermied predator, quantifying social learning, describing space use behavior
* Coordinated with national and international collaborators
* Led a team of ~10 people each year

Oct 2012-Jun 2018 NSF Graduate Research Fellow, University of Washington

* “Cognition gone wild: A test of the social intelligence hypothesis in wild birds”
* Established color-banded populations of 2 jay species
* Developed experimental methods for data collection on wild jays including: focal follows for conducting social network analysis, measuring boldness as the response to a novel threat, measuring problem-solving and social learning performance
* Trained jays to solve a complex task in aviaries and in the wild to serve as demonstrators for the social learning experiment
* Discovered social and asocial jays can socially learn, but differ in when they choose to; only social jays positively assort by boldness; jays in the wild are better problem-solvers than jays in captivity
* Coordinated with international collaborators
* Supervised ~5 research assistants each year

Aug 2017-Mar 2018 NSF Graduate Research Internship Program, Smithsonian Conservation Biology Institute

* “Using social network analysis to understand cooperative behavior in *Aphelocoma* species”
* Discovered jay species do not differ in quality of social relationships

Jun-Sep 2016 Crater Lake Science and Learning Center Student Fellow, Crater Lake National Park

* “Foraging, social interactions and learning ability of Clark’s Nutcrackers in relation to human-use areas in Crater Lake National Park”
* Discovered nutcrackers in high human use areas cache less than individuals greater than 500m from human use areas

Jun 2014-2017 Biological survey contractor, U.S. Army Engineer Research and Development Center

* “Ecosystem management and restoration research program, Russian Olive project”
* Discovered the configuration of the removal of invasive trees affects occupancy of breeding birds

Feb-Jun 2013 Research Assistant lab of Dr. Beecher, University of Washington

* “Are stranger songs more threatening if they are matchable?”
* Recorded song sparrow song repertoires and conducted a playback experiment

Jun-Aug 2012 Field research technician, Rota Avian Behavioral Ecology Program

Feb-May 2012 Field research technician, Fort Hood Natural Resources Management Unit

May-Aug 2011 Field research technician, lab of Dr. Betts, Oregon State University

Oct 2010-Apr 2011 Wildlife rehabilitation intern, The Conservancy of Southwest Florida

Aug-Sep 2010 Field research technician, lab of Dr. Byers, University of Idaho

Jun-Aug 2009 NSF Research experience for undergraduates, Indiana University Center for the Integrative Study of Animal Behavior

* “Foraging behavior in three sympatric entomopathogenic nematode species”
* Discovered previously undocumented jumping behavior in one nematode species

**TEACHING EXPERIENCE**

2017 Instructor “Animal Cognition”, University of Washington

* Developed all course material
* 20 classes over 10 weeks
* 30 upper-level undergraduate students

2017 Teaching assistant for the course “Introduction to Psychology”, University of Washington

2014, 2017 Teaching assistant for the online course “Human Development”, University of Washington

2013, 2017, 2018 Teaching assistant for the course “Biopsychology”, University of Washington

2013 Teaching assistant for the online course “Zoo Animal Behavior”, University of Washington

2012, 2013, 2018 Teaching assistant for the course “Animal Behavior”, University of Washington

2009, 2010 Teaching assistant for the course “Zoology”, Randolph-Macon Woman’s College

**PRESENTATIONS**

2022 Invited seminar speaker: Space use, exploratory behavior, and rapid range expansion in great-tailed grackles. UCLA Center for Behavior, Evolution, and Culture.

Invited virtual talk: Animal personality research in birds. Learn the Birds webinar.

2021 Invited virtual talk: Behaviors related to the rapid range expansion in great-tailed grackles. Central Valley Birding Symposium.

Invited virtual talk: Testing the social intelligence hypothesis in wild jays. Yolo Audubon Society.

Invited virtual talk: Behavioral flexibility, exploration, and space use in a rapidly expanding species. San Fernando Valley Audubon Society.

2020 Invited virtual seminar: Behavioral flexibility, exploration and space use in a rapidly expanding species. University of Washington Animal Behavior Journal Club.

Invited virtual talk: Behavioral flexibility, exploration and space use in a rapidly expanding species. Yolo Audubon Society.

Invited virtual lecture: Animal Personality. Binghamton University course: Animal Behavior.

Invited virtual talk: Behavioral flexibility in a rapidly expanding species. Arizona Audubon Society Conservation Lecture Series.

Invited talk: Behavioral flexibility in a rapidly expanding species. Arizona State University course: Making zines for social and ecological impact. Tempe, AZ.

2019 Testing the social intelligence hypothesis in wild birds. American Ornithological Society Conference. Anchorage, AK.

2017 Assortment by personality in Mexican Jays but not California Scrub-Jays. Inaugural Ornithology Twitter Conference (sponsored by British Ornithologists’ Union).

 Assortative grouping by boldness in Mexican Jays. Behaviour Conference. Estoril, Portugal.

2016 Mexican Jays and Western Scrub-Jays differ in quantity but not quality of social interactions. North American Ornithological Conference. Washington, D.C.

 Invited talk: Social behavior, personality, and learning in two jay species. Crater Lake National Park Science and Learning Center. Crater Lake, OR.

 Personality and learning in Western Scrub-Jays and Mexican Jays. Animal Behavior Society Conference. Columbia, MO.

2015 Social behavior, personality, and learning in two jay species. Oregon State University Bird Nerds Club. Corvallis, OR.

 Invited talk: Social behavior, personality, and learning in two jay species. Southwestern Research Station Seminar. Portal, AZ.

 Cognition and Social Behavior of *Aphelocoma* jays. AOU Willamette Valley Bird Symposium. Corvallis, OR.

2013 Are stranger songs more threatening if they are matchable? Animal Behavior Society Conference. Boulder, CO.

 Social complexity of the Gray Jay: evidence for a ‘third bird’. University of Washington Psychology Department Research Festival. Seattle, WA.

2010 Interspecific differences among three local entomopathogenic nematodes. Randolph-Macon Woman’s College Science Festival. Lynchburg, VA.

2009 Interspecific differences among three local entomopathogenic nematodes. The Committee on Institutional Cooperation Summer Research Opportunities Program. Madison, WI.

**SERVICE**

Outreach:

* Led a discussion about increasing diversity in STEM labs for 500 Women Scientist Northern California pod
* Mentored 45+ undergraduate and post-graduates in trapping, banding, radio telemetry and behavioral data collection specifically for birds
* Mentored 5 undergraduate independent projects
* Mentored 2 undergraduate honor’s theses
* Mentor for Seattle Girls in Engineering, Math and Science
* Mentor for Louis Stokes Alliance for Minority Participation Bridge Program at Oregon State University
* Guest speaker about science career paths and bird banding demonstrations for Willamette Mission State Park summer camp
* Guest speaker about Mariana crow natural history and wildlife tracking demonstrations for Boy Scouts of the territory of Guam
* Nature walk leader on Migratory Bird Day at Willamette Mission State Park

Manuscript and student grant competition reviews:

* Frontiers in Ecology and Evolution, Animal Behaviour, Northwest Science, Northwestern Naturalist, Royal Society Open Science, Ethology

Committees:

* Northwest Science – Board of directors; Website, Student Grants, and Nominations committees
* UW Psychology Department – Undergraduate Curriculum, Graduate Training, and Graduate Psychology Activities committees

**PROFESSIONAL DEVELOPMENT**

2020 Virtual Seminar: Every semester needs a plan - Time management in academia, National Center for Faculty Development and Diversity, Oregon State University

2019 Workshop: Analysis of social networks in R, American Ornithological Society Conference, Anchorage, AK

2018 Workshop: Introduction to Tidyverse, Smithsonian Conservation Biology Institute, Washington, D.C.

**PROFESSIONAL REFERENCES**

Dr. Corina Logan *(current supervisor)*:corina\_logan@eva.mpg.de

Dr. Renee Ha *(PhD supervisor)*: robinet@uw.edu

Dr. Mike Beecher *(PhD co-supervisor)*: beecher@uw.edu

Drs. Piotr Jablonski and Sangim Lee *(collaborators)*: snulbee@behecolpiotrsangim.org