

Dr. Kelsey B. McCune

kelseybmccune@gmail.com

University of California Santa Barbara Institute for Social, Behavioral and Economic
Research

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

EDUCATION

Ph.D. in Psychology, focus in Animal Behavior

“Cognition gone wild: A test of the social intelligence hypothesis in wild birds”

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

** = Post-study publication of the peer-reviewed preregistration

McCune KB, Valente JJ, Jablonski P, Lee S, Ha RR. 2021. Sociality mediates social information use in wild jays. *Submitted PLOS Biology*.

Berens JM⁺, Logan CJ, Folsom M, Sevchik A⁺, Bergeron L, **McCune KB. 2020. Validating morphological condition indices and their relationship with reproductive success in great-tailed grackles. *Undergoing revisions at Peer Community In Ecology*. [Posted to EcoEvoRxiv](#) 19 Nov. 2020.

Logan CJ, **McCune KB, MacPherson M, Johnson-Ulrich Z, Rowney C, Seitz B, Blaisdell AP, Deffner D, Wascher CAF. 2021. Are the more flexible individuals also better at inhibition? *In press at Animal Behavior & Cognition*.

Sevchik A⁺, Rowney C, Logan CJ, **McCune KB, Blackwell A, Lukas D. 2021. Investigating sex differences in genetic relatedness in great-tailed grackles in Tempe, Arizona to infer potential sex biases in dispersal. *In press at Animal Behavior & Cognition*.

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>.

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 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? \(.Rmd version\)](#). Pre-study peer reviewed at *PCI Ecology* ([review history](#)).

Logan CJ, **McCune KB**, Breen A, 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. \(.Rmd version\)](#). Pre-study peer reviewed at *PCI Ecology* ([review history](#)).

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? \(.Rmd version\)](#). Pre-study peer reviewed at *PCI Ecology* ([review history](#)).

Logan CJ, Lukas D, LeGrande-Rolls C, Bergeron L, Folsom M, Marfori Z, **McCune KB**. 2019. [Is behavioral flexibility related to foraging and social behavior in a rapidly expanding species? \(http://corinalogan.com/Preregistrations/g_flexforaging.html\)](#) In principle acceptance by *PCI Ecology* of the version on 6 Aug 2019 https://github.com/corinalogan/grackles/blob/master/Files/Preregistrations/g_flexforaging.Rmd. Pre-study peer review history.

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. \(.Rmd version\)](#). Pre-study peer reviewed at *PCI Ecology* ([review history](#)).

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, UC Santa Barbara <ul style="list-style-type: none"> • “Behavioral and physiological mechanisms for invasion success in great-tailed grackles” • Developed aviary and wild experiments • Led a team of ~10 people each year
Oct 2012-Jun 2018	NSF Graduate Research Fellow, University of Washington <ul style="list-style-type: none"> • “Cognition gone wild: A test of the social intelligence hypothesis in wild birds” • Established field sites and color-banded populations of 2 jay species • Discovered social and asocial jays can socially learn, but differ on when they choose to; only social jays positively assort by boldness; jays in the wild are better problem-solvers than jays in captivity
Aug 2017-Mar 2018	NSF Graduate Research Internship Program, Smithsonian Conservation Biology Institute <ul style="list-style-type: none"> • “Using social network analysis to understand cooperative behavior in <i>Aphelocoma</i> 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 <ul style="list-style-type: none"> • “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 removed habitat 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?”
- 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

- 2021 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
- Created virtual STEM workshops for the Girl Scouts Heart of Central California
- Mentored 43 undergraduate and post-graduates in trapping, banding, radio telemetry and behavioral data collection specifically for birds
- Mentored 4 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

Corina Logan, PhD (current supervisor)

Group Leader

Max Planck Institute for Evolutionary Anthropology

corina_logan@eva.mpg.de

snulbee@behecolpiotrsangim.org

Renee Ha, PhD (PhD supervisor)

Research Associate Professor

Department of Psychology

University of Washington

robinet@uw.edu

Michael Beecher, PhD

Professor Emeritus

Department of Psychology and Biology

University of Washington

beecher@uw.edu

Piotr Jablonski and Sang-im Lee

Professors

School of Biological Sciences

Lab of Behavioral Ecology & Evolution

Seoul National University