

Alison Ke

Graduate Group in Ecology, University of California, Davis

1072 Academic Surge, One Shields Ave, Davis, CA 95616

ake@ucdavis.edu • (215) 582-4848 • Website: <https://alisonke.github.io/>

Education

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| 2017 – 2022 (anticipated) | University of California, Davis
Ph.D., Ecology |
| 2013 – 2017 | University of California, Berkeley*
B.S., Forestry and Natural Resources
B.A., Statistics
Minor in Sustainable Design
<i>*Honors with high distinction</i> |

Publications

1. **Ke, A.**, Sollmann, R., Frishkoff, L., & Karp, D. S. (2022). A hierarchical N-mixture model to estimate behavioral variation and a case study of Neotropical birds. *Accepted to Ecological Applications*.
2. Fogarty, F., Yen, J., Fleishman, E., Sollmann, R., **Ke, A.** Multiple-region, N-mixture community model to assess associations of riparian area, fragmentation, and species richness. (*in review*)
3. Mastrángelo, M. E., Pérez-Harguindeguy, N., Enrico, L., Bennett, ... **Ke, A.**,... & Frishkoff, L. (2019). Key knowledge gaps to achieve global sustainability goals. *Nature Sustainability*, 1-7.
4. Frishkoff, L. O., **Ke, A.**, Martins, I. S., Olimpi, E. M., & Karp, D. S. (2019). Countryside biogeography: the controls of species distributions in human-dominated landscapes. *Current Landscape Ecology Reports*, 4(2), 15-30.
5. Karp, D. S., Echeverri, A., Zook, J., Juárez, P., **Ke, A.**, Krishnan, J., ... & Frishkoff, L. O. (2019). Remnant forest in Costa Rican working landscapes fosters bird communities that are indistinguishable from protected areas. *Journal of Applied Ecology*, 56(7), 1839-1849.
6. **Ke, A.**, Sibiya, M. D., Reynolds, C., McCleery, R. A., Monadjem, A., & Fletcher, R. J. (2018). Landscape heterogeneity shapes taxonomic diversity of non-breeding birds across fragmented savanna landscapes. *Biodiversity and Conservation*, 1-18.
7. Love, K., Kurz, D. J., Vaughan, I. P., **Ke, A.**, Evans, L. J., & Goossens, B. (2018). Bearded pig (*Sus barbatus*) utilisation of a fragmented forest–oil palm landscape in Sabah, Malaysian Borneo. *Wildlife Research*, 44(8), 603-612.
8. Reynolds, C., Fletcher, R. J., Carneiro, C. M., Jennings, N., **Ke, A.**, LaScaleia, M. C., ... & Magagula, C. N., (2018). Inconsistent effects of landscape heterogeneity and land-use on animal diversity in an agricultural mosaic: a multi-scale and multi-taxon investigation. *Landscape Ecology*, 1-15.
9. **Ke, A.**, Luskin, M. S., (2017). Integrating disparate occurrence reports to map data-poor species ranges and occupancy: a case study of the Vulnerable bearded pig *Sus barbatus*. *Oryx*, 1-11.
10. Luskin, MS., **Ke, A.**, (2017). The bearded pig. In Melletti, M., & Meijaard, E. (Eds). *Ecology, Conservation and Management of Wild Pigs and Peccaries*. Cambridge University Press.

11. Luskin, MS., Linkie, M., Meijaard, E., **Ke, A.**, (2016). *Sus barbatus*. The IUCN Red List of Threatened Species: e.T41772A10559190.

Peer Review

Oryx; Scientific Reports; Biotropica; Biodiversity and Conservation; Ecography

Presentations and Workshop Sessions

A hierarchical model to estimate species shifts in behavior and abundance. 2021. Oral presentation at the Ecological Society of America conference.

Overexploitation. 2019. Guest lecture in Tropical Ecology (WFC 198) at UC Davis.

What I wish I knew about grad school. 2018. Guest lecture at the Aggie Connections Freshman Seminar at UC Davis.

Landscape heterogeneity shapes bird taxonomic diversity across fragmented savanna landscapes. 2018. Oral presentation at the Wildlife, Fish, and Conservation Biology Seminar at UC Davis.

Landscape heterogeneity shapes bird taxonomic diversity across fragmented savanna landscapes. 2018. Oral presentation at the American Ornithological Society conference in Tucson, AZ.

Contrasting avian taxonomic, functional, and phylogenetic diversity between IUCN protection levels. 2017. Oral presentation at the Bay Area Conservation Biology Symposium at UC Davis.

Avian Responses to Landscape Heterogeneity. 2016. Oral presentation at the Savanna Research Centre Biodiversity Symposium in Swaziland.

Automatic Camera Trap Data Organization, Storage, and Analysis. 2015. Oral presentation at the Wildlife Society's Advanced Camera Trapping Workshop in Santa Rosa, California.

Awards

- 2021 ARCS Fellowship (\$12,000)
Jastro Research Award (\$6,000)
Pielou Award (Best contribution to statistical ecology at ESA conference; \$250)
- 2020 Jastro Research Award (\$3,700)
Selma Herr Award (\$4,700)
- 2019 Academic Senate Grant (\$25,000, co-written by Daniel Karp)
Selma Herr Award (\$3,000)
Hemispheric on the Americas Summer Field Research Award (\$1,600)
- 2018 Selma Herr Award (\$3,400)
American Ornithological Society Student Membership Award
- 2017 Institute of International Studies Outstanding Poster Award (\$250)
NSF Graduate Research Fellowship (\$138,000)
- 2016 Institute of International Studies Merit Scholarship (\$2,000)
Show-Kotok Scholarship (Merit-based scholarship at UC Berkeley; \$2,000)
College of Natural Resources Travel Grant (\$1,000)
- 2015 Grant-in-Aid of Research (\$500)
College of Natural Resources Travel Grant (\$1,000)
SERC Decal Fellowship (\$200 for class resources)
- 2014 Dineen Scholarship (Merit-based scholarship at UC Berkeley; \$5,000)

Teaching Experience

- Spring 2020 **Teaching Assistant for Bayesian Models: A Statistical Primer (ECL 298)**
- Spring 2019 **Teaching Assistant for Methods in Wildlife and Fish Biology (WFC 100)**
- Winter 2019 **Teaching Assistant for Tropical Ecology (WFC 198)**
- Winter 2019 **Helper for R-Davis Data Carpentry Course**
- Fall 2018 **Teaching Assistant for Conservation Biology (WFC 198)**
- Spring 2015 **Mathematics Tutor for The MasterCard Foundation**
One-on-one tutoring for a UC Berkeley Student in calculus
- Fall 2015 **Facilitator for “Sustainable Energy for a Greener Tomorrow”**
UC Berkeley Energy & Resources Group; 18 undergraduate students
- Fall 2014 **Mathematics Tutor for The Student Learning Center**
Drop-in tutoring for over 100 UC Berkeley students in calculus and statistics

Relevant research experience

- 2019-present **Field project leader in the Esmeraldas Province, Ecuador**
Planned and implemented experiment to study the ways agriculture affects cavity-nesting bird distribution and reproduction. Searched for natural cavities, installed and monitored 100 nest boxes, and conducted sentinel insect experiments
- 2018-present **Davis Nest Box Network Field Leader**
Coordinate with our museum staff, train interns, schedule team visits, and ensure programmatic and data integrity for a bluebird nest box network in Davis parks
- 2018 **Field project leader in the Magdalena River Valley, Colombia**
Planned and completed nine weeks of bird and vegetation surveys at 144 sites along the Magdalena River Valley
- 2016 - 2017 **IRES Researcher in Swaziland with the University of Florida**
Completed nine weeks of field work in Swaziland, focusing on bird surveys, to understand the role of multi-scale heterogeneity on biodiversity
- 2014 - 2016 **Undergraduate Researcher in the Potts Lab**
Sorted photos of Sumatran wildlife, used automated software to manage the data, and mapped species distributions using ArcGIS
- 2016 - 2017 **Undergraduate Researcher in the Brashares Lab**
Trained two teams in camera trap data management, and conducted wildlife ecology research in Mendocino County and Gorongosa National Park

Professional Affiliations & Leadership Roles

- Stewardship Chair of Society for Conservation Biology (UC Davis Chapter)
- Mentor for WiSE (Women in Science and Engineering) Mentorship Program
- Member of American Ornithological Society
- Member of Graduate Group in Ecology Diversity, Equity, and Inclusion Task Force

Languages

English – fluent; Spanish – limited working proficiency; Mandarin – limited working proficiency