

Jacob C. Cooper, Ph.D., M.Sc. & M.A.

Curriculum Vitae

IRACDA Postdoctoral Fellow, University of Kansas

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Education

- 2016-2021 **The University of Chicago**, Chicago, Illinois, USA
Ph.D. & Master of Science in Evolutionary Biology
Advisor: Dr. John M. Bates, The Field Museum
- 2013-2016 **The University of Kansas**, Lawrence, Kansas, USA
Master of Arts in Ecology & Evolutionary Biology
Advisor: Dr. Jorge Soberón
- 2009-2013 **Louisiana State University**, Baton Rouge, Louisiana, USA
Bachelor of Science, Biology
Advisor: Dr. J. Van Remsen

Employment

- 2021-present **The University of Kansas**
IRACDA Postdoctoral Research Fellow
Advisor: Dr. Town Peterson
- 2019-2021 **The University of Chicago**
Graduate Teaching Assistant for Dr. Eric Larsen (Thrice) & Dr. Bruce Patterson
- 2016 **The University of Chicago**
Summer research position with Dr. John Bates
- 2016 **The University of Kansas**, Academic Semester Curatorial Assistant
Advisor: Mark B. Robbins
- 2013-2015 **The University of Kansas**
Graduate Research Assistant for Dr. Jorge Soberón
- 2013-2014 **The University of Kansas**
Graduate Teaching Assistant for Dr. Julie Campbell
- 2009-2014 **The Bird Conservancy of the Rockies**, summer Field Technician
Supervisors Jeff Birek, Chris White, Jay Carlisle
- 2013 **Tulane University**
Position: Field Technician for Ashley Peele

Awards and Grants

Research

- 2019 **The University of Chicago Steiner Award**
Co-Investigator: Field testing avian niche models
Amount: \$750 USD
- 2019 **The University of Chicago CEB Pritzker Lab Fund**
Principal Investigator: Relationships of Pan-African Birds
Amount: \$2,300 USD
- 2018 **The University of Chicago CEB Summer Travel Grant**
Principal Investigator: Morphology of Afromontane Birds
Amount: \$1,500 USD
- 2018 **Collège de France Science Research Travel Grant**
Principal Investigator: Phylogeography of African Birds
Amount: \$6,000 USD
- 2017 **Committee on Evolutionary Biology DNA Funds**
Principal Investigator: Phylogeography of African Birds
Amount: \$2,000 USD
- 2017 **National Geographic Research & Exploration Grant**
Principal Investigator: Birds of the Bakossi Mountains, Cameroon
Amount: \$10,000 USD
- 2017 **The Field Museum Council on Africa Grant**
Principal Investigator: Birds of the Bakossi Mountains, Cameroon
Amount: \$3,500 USD
- 2017 **The University of Chicago CEB Summer Travel Grant**
Principal Investigator: Morphology of Afromontane Birds
Amount: \$1,450 USD
- 2017 **The University of Chicago Hinds Fund Grant**
Principal Investigator: Phylogeography of *Cinnyris reichenowi*
Amount: \$1,330 USD
- 2015 **The University of Kansas Summer Support Grant**
Recipient, University of Kansas, USA
Amount: \$3,000 USD
- 2014 **National Geographic Society/Waite's Grant**
Co-Principal Investigator
Location: Equatorial Guinea
Amount: \$12,000 USD
- 2014 **Panorama Grant**
Attendance at NSF Conference on Data Digitization
Location: University of California, Riverside
Amount: \$875 USD

Meetings/Workshops

- 2015 **American Ornithologists' Union/Cooper Ornithological Society Meeting**
American Ornithologists Union Student Travel Award
Travel Grant: \$270
- 2014 **CABalliance Professional Development Workshop**
Central African Biodiversity Alliance
Location: Yaoundé, Cameroon
Travel Grant: All expenses to attend covered
- 2014 **ADBC Tri-trophic Database Workshop**
Panorama Grant, KU Biodiversity Institute
Location: University of California, Riverside
Travel Grant: see aforementioned Panorama Grant

Academic

- 2012 **Udall Scholar**, Honorable Mention
- 2009-2013 **LSU Alumni Association Top 100 Scholar**
- 2009-2013 **LSU Golden Oaks Award**

Publications & Presentations

H-index: 7, Citations: 414 (Source: [GoogleScholar](https://scholar.google.com/citations?user=...), February 2023).

Peer-reviewed Publications

1. Mélusine F. Velde†, Elizabeth M. Besozzi, Billi A. Krochuk, Kate M. Henderson, Brian R. Tsuru, Sara Velásquez Restrepo, Holly M. Garrod & **Jacob C. Cooper**†. *Accepted*. What constitutes a community? A co-occurrence exploration of the Costa Rican avifauna. *Neotropical Biodiversity*. †These authors should be considered co-first author.
2. Eliason, Chad, **Jacob C. Cooper**, Shannon J. Hackett, Erica Zahnle, Tatiana Pequeño Saco, J. Dylan Maddox, Taylor Hains, Mark E. Hauber & John M. Bates. 2023. Interspecific hybridization explains rapid gorget color divergence in *Heliodoxa* hummingbirds (Aves: Trochilidae). *Royal Society Open Science* **10**(3):221603. doi: [10.1098/rsos.221603](https://doi.org/10.1098/rsos.221603)
3. **Cooper, Jacob C.** 2022. Mountain Sawwing (*Psalidoprocne fuliginosa*), version 2.0. In *Birds of the World* (Paul G. Rodewald, Ed.). Cornell Lab of Ornithology, Ithaca, NY, USA. doi:[10.2173/bow.mousaw1.02](https://doi.org/10.2173/bow.mousaw1.02)
4. **Cooper, Jacob C.**, Nicholas M. A. Crouch, Adam Ferguson, John M. Bates. 2022. Climatic refugia and reduced extinction correlate with underdispersion in mammals and birds in Africa. *Ecology and Evolution*. doi:[10.1002/ece3.8752](https://doi.org/10.1002/ece3.8752)

5. Tobias, Joseph A., Catherine Sheard, Alex L. Pigot, Adam J. M. Devenish, ..., **Jacob C. Cooper**, ..., & Matthias Schleuning. 2022. AVONET: morphological, ecological and geographical data for all birds. *Ecology Letters* doi:[10.1111/ele.13898](https://doi.org/10.1111/ele.13898)
6. **Cooper, Jacob C.** 2021. Hierarchical analyses of community biogeography in the Afromontane highlands. *Frontiers of Biogeography* **13**.04: e51310. doi: [10.21425/F5FBG51310](https://doi.org/10.21425/F5FBG51310)
7. **Cooper, Jacob C.**, J. Dylan Maddox, Kellie McKague & John M. Bates. 2021. Multiple lines of evidence indicate ongoing allopatric and parapatric diversification in an Afromontane sunbird (*Cinnyris reichenowi*). *Ornithology* (formerly *The Auk*) **138**:1-21. doi:[10.1093/ornithology/ukaa081](https://doi.org/10.1093/ornithology/ukaa081)
8. **Cooper, Jacob C.** 2020. Depredation of Golden-crowned Kinglet (*Regulus satrapa*) by a presumed American Bullfrog (*Lithobates catesbeianus*) in an urban park. *Meadowlark* **29**.4:10-11.
9. Guimarães Capurucho, João Marcos, Mary Ashley, Brian Tsuru, **Jacob C. Cooper** & John M. Bates. 2020. Dispersal ability correlates with range size in Amazonian habitat restricted birds. *Proceedings of the Royal Society B* **287**(1939):20201450. doi:[10.1098/rspb.2020.1450](https://doi.org/10.1098/rspb.2020.1450)
10. Owens, Hannah L., Vivian Ribiero, Erin Saupe, Marlon E. Cobos, Peter Hosner, **Jacob C. Cooper**, Abdallah Samy, Vijay Barve, Narayani Barve, Carlos Muñoz, & A. Townsend Peterson. 2020. Acknowledging uncertainty in evolutionary reconstructions of ecological niches. *Ecology & Evolution*. doi:[10.1002/ece3.6359](https://doi.org/10.1002/ece3.6359)
11. Voight, Janet R., **Jacob C. Cooper**, & Raymond W. Lee. 2020. Stable isotopic evidence of misotrophy in xylophagoids, deep-sea wood-boring bivalves. *Frontiers in Marine Science*. **7**:50. doi:[10.3389/fmars.2020.00050](https://doi.org/10.3389/fmars.2020.00050)
12. **Cooper, Jacob C.** 2018. Niche theory and its relation to morphology and phenotype in geographic space: a case study in woodpeckers (Picidae). *Journal of Avian Biology* doi:[10.1111/jav.01771](https://doi.org/10.1111/jav.01771)
13. Da Silva, Thilina, Sumudu W. Fernando, Mark B. Robbins, **Jacob C. Cooper**, Eric B. Fokam, & A. Townsend Peterson. 2018. Recognition of a new generic-level swallow taxon from Central Africa. *Journal of Avian Biology* doi:[10.1111/jav.01698](https://doi.org/10.1111/jav.01698)
14. **Cooper, Jacob C.** & Jorge Soberón. 2018. Creating individual accessible area hypotheses improves stacked species distribution model performance. *Global Ecology & Biogeography* **27**:156-165. doi:[10.1111/geb.12678](https://doi.org/10.1111/geb.12678)
15. Saupe, Erin E., Narayani Barve, Hannah L. Owens, **Jacob C. Cooper**, Peter Hosner & A. Townsend Peterson. 2018. Reconstructing ecological niche evolution when niches are incompletely characterized. *Systematic Biology* **67**:428-438. doi:[10.1093/sysbio/syx084](https://doi.org/10.1093/sysbio/syx084)
16. Ingenloff, Kathryn, Christopher Hensz, Tashitso Anamza, Vijay Barve, Lindsay P. Campbell, **Jacob C. Cooper**, Ed Komp, Laura Jimenez, Karen Olson, Luis Osorio-Olvera, Hannah L. Owens, A. Townsend Peterson, Abdallah Samy, Marianna Simões & Jorge Soberón. 2017. Predictable invasion dynamics in American populations of the Eurasian Collared Dove *Streptopelia decaocto*. *Proc.R. Soc. B* **284**:20171157. doi:[10.1098/rspb.2017.1157](https://doi.org/10.1098/rspb.2017.1157)

17. Brzeski, Kristin E., Jared D. Wolfe, **Jacob C. Cooper** & Luke L. Powell. 2016. Camera sighting of Congo Clawless otter in the midst of rapid development on mainland Equatorial Guinea. *IUCN Otter Spec. Group Bull.* **33**(2).
18. **Cooper, Jacob C.**, Oscar Johnson, Tristan J. Davis, Ryan S. Terrill, Jared D. Wolfe, Kristin E. Brzeski, Amancio M. Etingüe & Luke L. Powell. 2017. Notes on the distribution of the avifauna of Bioko Island, Equatorial Guinea, including one new country record. *Malimbus* **39**(1):1-15.
19. **Cooper, Jacob C.** & Diego Barragán. 2017. Tawny-throated Leaf-tosser *Sclerurus mexicanus*, version 1.0. In *Birds of the World* (T. S. Schulenberg, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. doi.org:[10.2173/bow.tatlea1.01](https://doi.org/10.2173/bow.tatlea1.01)
20. **Cooper, Jacob C.** & Andrés M. Cuervo. 2017. Vocal variation and species limits in the *Sclerurus mexicanus* complex. *Wilson Journal of Ornithology* **129**(1):13-24.
21. **Cooper, Jacob C.**, Luke L. Powell & Jared D. Wolfe. 2016. Notes on the birds of Equatorial Guinea, including nine* first country records. *Bull. of the African Bird Club* **23**(2):152-163. *see correction in following bulletin; one taxon misidentified.
22. Simões, Marianna V. P., Laura C. V. Breitreutz, Mabel Alvarado G., Stephen M. Baca, **Jacob C. Cooper**, Liam E. Heins, Kaylee S. Herzog & Bruce S. Lieberman. 2016. The evolving theory of evolutionary radiations. *Trends in Ecology and Evolution* **31**(1):27-34. doi:[10.1016/j.tree.2015.10.007](https://doi.org/10.1016/j.tree.2015.10.007)

Invited Manuscripts

1. **Cooper, Jacob C.** 2017. Book review of *Why Birds Matter* edited by Çağan Hakkı Şekercioğlu, Daniel G. Wenny & Christopher J. Whelan. *Quarterly Review of Biology*. **92**:464-465. doi:[10.1086/694954](https://doi.org/10.1086/694954)

Preprints

1. **Cooper, Jacob C.** & Diego Barragán Díaz. 2022. Is niche divergence more likely in parapatry? A test in *Sclerurus mexicanus* sensu lato (Aves: Furnariidae). *BioRxiv* doi:[10.1101/2022.12.06.519370](https://doi.org/10.1101/2022.12.06.519370)
2. Velde, Mélusine, **Jacob C. Cooper** & Holly M. Garrod. 2023. Testing the accuracy of species distribution models based on community science data. *BioRxiv* doi:[10.1101/2023.01.13.523331](https://doi.org/10.1101/2023.01.13.523331)

Oral Presentations

1. **Cooper, Jacob C.** "Geographical ecology and evolution of birds." Pittsburg State University, invited seminar. **14 October 2022.**
2. **Cooper, Jacob C.** "Biogeographic and ecologic drivers of avian diversity." University of Chicago Dissertation Defense. **22 July 2021.** <https://youtu.be/9ddZXaztNsc>
3. **Cooper, Jacob C.** "Diversity and distribution of Rift birds." North American Ornithological Congress and 4th Meeting of the American Ornithological Society. **August 2020.** <https://youtu.be/59o6LSk3DMk>

4. **Cooper, Jacob C.** "The importance of geography and environment for diversification: a case study in the Northern Double-collared Sunbird *Cinnyris reichenowi*". 3rd Meeting of the American Ornithological Society. **June 2019.**
5. **Cooper, Jacob C.** "The past, present, and future of [ornithology in Cameroon]*." Evanston Bird Club invited presentation, Evanston, Illinois. **October 2017.** *Grammar fixed from original title.
6. **Cooper, Jacob C.,** Kellie McKague, and Dylan Maddox. "A Comprehensive Phylogeny of Afromontane Birds." 1st Meeting of the American Ornithological Society, East Lansing, Michigan. **August 2017.**
7. **Cooper, Jacob C.** "Testing Stacked Distribution Models: Predicting Species Richness and Community Composition in Hummingbirds." 67th Meeting of the Kansas Ornithological Society, Emporia, Kansas. **October 2015.**
8. **Cooper, Jacob C.** "Testing Stacked Distribution Models: Predicting Species Richness and Community Composition in Hummingbirds." 133rd Meeting of the American Ornithologists' Union/85th Meeting of the Cooper Ornithological Society Joint Meeting, University of Oklahoma, Norman, Oklahoma. **August 2015.**
9. **Cooper, Jacob C.** "Supplementing Specimen-based Inventories with Observations." Biodiversity Informatics Training Curriculum meeting on Biodiversity Inventories, Buea, Cameroon. **March 2015.** <https://www.youtube.com/watch?v=m2VgL7Da8-E>
10. **Cooper, Jacob C.** "Citizen Science and its Importance for Creating Effective Ecological Niche Models." 66th Meeting of the Kansas Ornithological Society, Salina, Kansas. **October 2014.**

Invited Presentations and Formal / Informal Talks

1. Sierra Club of Illinois, Shawnee Chapter (presentation; 2021)
2. Ana G. Méndez University, Puerto Rico (career talk; 2020)
3. Field Museum, Chicago, USA online presentations (2020-2021; 5 presentations).
4. University of Chicago, USA guest lecturer (biogeography; 2020).
5. Collège de France, Paris, France (presentation; 2018).
6. Evanston Bird Club, Evanston, USA (presentation; 2017).

Poster Presentations

1. **Cooper, Jacob C.,** Luke L. Powell and Jared D. Wolfe. "Equatorial Guinea Bird Initiative: Ornithology and Conservation in a Rapidly Developing Central African Nation." 132nd Meeting of the American Ornithologists' Union / 84th Meeting of the Cooper Ornithological Society / Society of Canadian Ornithologists Joint Meeting, Estes Park, Colorado. **September 2014.**

Advising

Undergraduates

1. **Sara Velásquez Restrepo, Universidad EAFIT, Medellín, Colombia.** Primary advisor for undergraduate thesis titled: *Ecological niche evolution in a group of related Andean birds (Aves: Cotingidae)*. Defended 11/2020.
2. **Mélusine F. Velde, University of Chicago, Chicago, United States.** Adjunct project advisor for undergraduate thesis titled: *Field tests of species distribution models based on community science data*. Mentored with supervision from Dr. John M. Bates. Submitted 03/2021, [uploaded thesis to bioRxiv as a preprint](#).

Teaching Experience

2022-2023	Adj. Lecturer, Intro. Biology & Field Ornithology, Haskell Indian Nations University
2017-2020	Teaching assistant for Dr. Eric Larsen, University of Chicago (2x Ecology & Evolution of the desert southwest; 1x Public and Private Lives of Insects; 2x Ecology field trip assistant [also with Dr. Cathy Pfister]).
2020	Guest lecturer for Biogeography with Dr. Larry Heaney, University of Chicago.
2019	Teaching assistant for Biogeography with Dr. Bruce Patterson, University of Chicago.
2015	Guest lecturer, Biodiversity Informatics Training Curriculum, Buea, Cameroon.
2013-2015	Teaching assistant, University of Kansas (5 classes)

Field Experience

2021-2022	Resurveys of the Kansas avifauna, University of Kansas
2022	Pelagic and continental bird surveys, Antarctica, South Georgia & Falklands
2019	Community surveys of birds in Costa Rica. Collaboration between University of Chicago, Field Museum, and Costa Rica Bird Observatories
2018	Ornithological inventory in Cameroon. Organization: University of Kansas.
2017	Ornithological inventory in Cameroon. Organization: Field Museum.
2016	Ornithological inventory in Nicaragua. Organization: University of Kansas.
2016	Ornithological survey in Equatorial Guinea. Organization: Biodiversity Initiative.
2015	Ornithological inventory in Cameroon. Organization: University of Kansas.
2014	Ornithological survey in Equatorial Guinea. Organization: Biodiversity Initiative.
2013	Ornithological surveys in North Dakota, South Dakota & Wyoming. Organization: Bird Conservancy of the Rockies.
2013	Bird ring resighting survey in Jamaica. Organization: Tulane University.
2012	Ornithological surveys in Idaho. Organization: Idaho Bird Observatory.
2012	Sensitive species surveys in Colorado. Organization: Bird Conservancy of the Rockies.
2009-2011	Ornithological surveys in Arizona & New Mexico. Organization: Bird Conservancy of the Rockies.
2008	Ornithological surveys in Colorado & Utah. Organization: Bird Conservancy of the Rockies.

Reviewing

The Condor, *Ornithological Applications*, *Methods in Ecology and Evolution*, *Biological Journal of the Linnean Society*, *PeerJ*, *Mitochondrial DNA Part B: Resources*, *Journal of Natural History*, *Journal of Ornithology*, *Ecology & Evolution*, *Scopus*. Since 2019, verifying reviews (when possible) through [Publons](#).

Current Memberships

American Ornithological Society (2014-present), *West African Ornithological Society* (2017-present), *African Bird Club* (2016-present), *Kansas Ornithological Society* (2021-present), *International Ornithologists' Union* (2022-present).

Skills

- *Programming* in R, Bash, and Python in Linux and Windows operating systems
- *Bioinformatics* using large-scale genomics datasets
- *GIS* in QGIS, ArcGIS, R
- *Computer organization* with LibreOffice Suite, Microsoft Office Suite, other freeware
- *Field skills* including audio recording, mist netting & handling wild birds, wilderness first aid, driving (manual & automatic for left- and right-hand drive), trail-clearing
- *Language skills* include advanced proficiency with Spanish, and classes in or working experience with Portuguese, Afrikaans, German, French, and Cherokee