

Jesse Alston

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EDUCATION

University of Wyoming, Laramie, WY (January 2017 – February 2021)

Ph.D. in Ecology (Statistics minor)

Graduate Certification in Teaching and Learning

Davidson College, Davidson, NC (August 2010 - May 2014)

B.A. in Environmental Studies (Economics minor)

RESEARCH AND PROFESSIONAL EXPERIENCE

- 2022-present **Assistant Professor**, School of Natural Resources and the Environment, University of Arizona, Tucson, AZ
- 2021-present **Adjunct Faculty**, Department of Zoology and Physiology, University of Wyoming, Laramie, WY
- 2021-2022 **Postdoctoral Researcher**, Center for Advanced Systems Understanding, Görlitz, Germany
- 2017-2021 **Research/Teaching Assistant**, University of Wyoming, Laramie, WY
- 2016 **Research Technician**, Wyoming Natural Diversity Database, Laramie, WY
- 2016 **Biological Technician (Wildlife)**, United States Forest Service, Leavenworth, WA
- 2014-2015 **Wildlife Research Technician**, Natural Resources Research Institute, Duluth, MN
- 2014 **Biological Technician (Wildlife)**, United States Forest Service, Leavenworth, WA
- 2013 **Summer Research Fellow**, Davidson Research Initiative, Davidson College, Davidson, NC

PEER-REVIEWED PUBLICATIONS

(*equal contributions; graduate/postdoctoral mentee; †undergraduate mentee)

17. Burton, A.C., C. Beirne, K. Gaynor, C. Sun, A. Granados, 216 others including **J.M. Alston**, and R. Kays. Mammal responses to global changes in human activity vary by trophic group and landscape. *Nature Ecology and Evolution*, in press.
16. Lujan, E.†*, R. Nielsen†*, Z. Short†, S. Wicks†, W.N. Watetu, L.M. Khasoha, T.M. Palmer, J.R. Goheen, and **J.M. Alston**. 2023. Symbiotic acacia ants drive nesting behavior by birds in an African savanna. *Biotropica* 55:1101-1105. <https://doi.org/10.1111/btp.13276>
15. **Alston, J.M.**, D.A. Keinath, C.K.R. Willis, C.L. Lausen, J.M. O’Keefe, J.D. Tyburec, H.G. Broders, P.R. Moosman, T.C. Carter, C.L. Chambers, E.H. Gillam, K. Geluso, T.J. Weller, D.W. Burles, and J.R. Goheen. 2023. Environmental drivers of body size in North American bats. *Functional Ecology* 37:1020-1032. <https://doi.org/10.1111/1365-2435.14287>
14. **Alston, J.M.***, C.H. Fleming*, R. Kays, J.P. Streicher, C.T. Downs, T. Ramesh, B. Reineking, and J.M. Calabrese. 2023. Mitigating pseudoreplication and bias in resource selection functions with autocorrelation-informed weighting. *Methods in Ecology and Evolution* 14:643-654. <https://doi.org/10.1111/2041-210X.14025>

13. Wells, H.B.M., R.D. Crego, **J.M. Alston**, S.K. Ndung'u, L.M. Khasoha, C.G. Reed, A.A. Hassan, S. Kurukura, J. Ekadeli, M. Namoni, T.R. Kartzinel, T.M. Palmer, J.R. Goheen, P.S. Stewart, D.M. Kimuyu, A.A. Wolf, T.P. Young, and R.M. Pringle. 2023. Wild herbivores enhance resistance to invasion by exotic cacti in an African savanna. *Journal of Ecology* 111:33-44. <https://doi.org/10.1111/1365-2745.14010>
12. Kays, R., M.V. Cove, 144 others including **J.M. Alston**, and W.J. McShea. 2022. SNAPSHOT USA 2020: a second coordinated national camera trap survey of the United States during the COVID-19 pandemic. *Ecology* 103:e3775. <https://doi.org/10.1002/ecy.3775>
11. **Alston, J.M.**, M.E. Dillon, D.A. Keinath, I.M. Abernethy, and J.R. Goheen. Daily torpor reduces the energetic consequences of microhabitat selection in a widespread bat. 2022. *Ecology* 103: e3677. <https://doi.org/10.1002/ecy.3677>
10. **Alston, J.M.***, C.G. Reed*, L.M. Khasoha, B.R.P. Brown, G. Busienei, N. Carlson, T.C. Coverdale, M. Dudenhofer, M.A. Dyck, J. Ekeno, A.A. Hassan, R. Hohbein, R.P. Jakopak, B. Kimiti, S. Kurukura, P. Lokeny, A.M. Louthan, S. Musila, P.M. Musili, T. Tindall, S. Weiner, T.R. Kartzinel, T.M. Palmer, R.M. Pringle, and J.R. Goheen. 2022. Ecological consequences of large herbivore exclusion in an African savanna: 12 years of data from the UHURU experiment. *Ecology* 103: e3649. <https://doi.org/10.1002/ecy.3649>
9. Silva, I., C.H. Fleming, M.J. Noonan, **J.M. Alston**, C. Folta, W.F. Fagan, and J.M. Calabrese. 2022. Autocorrelation-informed home range estimation: a review and practical guide. *Methods in Ecology and Evolution* 13: 534-544. <https://doi.org/10.1111/2041-210X.13786>
8. Wells, H.B.M., R.D. Crego, Ø.H. Opedal, L. Malingati, **J.M. Alston**, C.G. Reed, S. Weiner, S. Kurukura, A.A. Hassan, M. Namoni, J. Ekadeli, D.M. Kimuyu, T.P. Young, T.R. Kartzinel, T.M. Palmer, R.M. Pringle, and J.R. Goheen. 2021. Experimental evidence that effects of megaherbivores on mesoherbivore space use are influenced by species' traits. *Journal of Animal Ecology* 90: 2510-2522. <https://doi.org/10.1111/1365-2656.13565>
7. Cove, M.V., R. Kays, 149 others including **J.M. Alston**, and W.J. McShea. 2021. SNAPSHOT USA: the first coordinated national camera trap survey of the United States – data from 2019. *Ecology* 102: e03353. <https://doi.org/10.1002/ecy.3353>
6. **Alston, J.M.***, and J.A. Rick*. 2021. A beginner's guide to conducting reproducible research. *Bulletin of the Ecological Society of America* 102: e01801. <https://doi.org/10.1002/bes2.1801>
5. **Alston, J.M.**, M.J. Joyce, J.A. Merkle, and R.A. Moen. 2020. Temperature shapes movement and habitat selection by a heat-sensitive ungulate. *Landscape Ecology* 35: 1961-1973. <https://doi.org/10.1007/s10980-020-01072-y>
4. **Alston, J.M.** 2019. Open access principles and practices benefit conservation. *Conservation Letters* 12: e12672. <https://doi.org/10.1111/conl.12672>
3. **Alston, J.M.**, I.M. Abernethy, D.A. Keinath, and J.R. Goheen. 2019. Roost selection by male northern long-eared bats (*Myotis septentrionalis*) in a managed fire-adapted forest. *Forest Ecology and Management* 446: 251-256. <https://doi.org/10.1016/j.foreco.2019.05.034>

2. **Alston, J.M.**, B.M. Maitland, B.T. Brito, S. Esmaili, A.T. Ford, B.R. Hays, B.R. Jesmer, F.J. Molina, and J.R. Goheen. 2019. Reciprocity in restoration ecology: when and where does large carnivore reintroduction restore ecosystems? *Biological Conservation* 234: 82-89. <https://doi.org/10.1016/j.biocon.2019.03.021>
1. **Alston, J.M.**, J.E. Millard, J.A. Rick., B.W. Husby, and L.A. Mundy. 2017. Observations of notable parental behaviours of Northern Spotted Owls (*Strix occidentalis caurina*). *Canadian Field-Naturalist* 131: 225-227. <http://dx.doi.org/10.22621/cfn.v131i3.1874>

PEER-REVIEWED PUBLICATIONS (PREPRINTS/IN REVIEW)

(*equal contributions; graduate/postdoctoral mentee; †undergraduate mentee)

Alston, J.M., C.H. Fleming, M.J. Noonan, M.A. Tucker, I. Silva, C. Folta, T.S. Akre, A.H. Ali, J.L. Belant, D. Beyer, N. Blaum, R. Cunha de Paula, J. Dekker, J. Drescher-Lehman, N. Farwig, C. Fichtel, C. Fischer, A.T. Ford, R. Janssen, F. Jeltsch, P. Kappeler, S. LaPoint, A.C. Markham, E.P. Medici, R. Morato, R. Nathan, K. Olson, B.D. Patterson, T. Petroelje, E. Esterci Ramalho, S. Rösner, L.G.R.O. Santos, D.G. Schabo, N. Selva, A. Sergiel, O. Spiegel, W. Ullmann, F. Zieba, T. Zwijacz-Kozica, G. Wittemyer, W.F. Fagan, T. Müller, and J.M. Calabrese. Clarifying space use concepts in ecology: range vs. occurrence distributions. In revision. Preprint available on *bioRxiv*: <https://doi.org/10.1101/2022.09.29.509951>

Kays, R.W., M.H. Snider, G. Hess, M.V. Cove, A.J. Jensen, H. Shamon, W.J. McShea, B. Rooney, 107 others including **J.M. Alston**. Climate, food, and humans predict mammal communities in the United States. In review.

Lizee, M., M. Shaikh, S. Mahoney, A. McKellar, J.M. Alston, J. Dunn-Mucklowe, H. Broders, J. Welch, M. Argollo de Menezes, and M. Reudink. Modeling extinction risk for unassessed bat species based on morphological, ecological, geographic, and climatic predictors. In revision.

RESEARCH FUNDING - EXTERNAL (\$377,500 in total; \$377,500 as PI; \$287,500 for me)

\$180,000 *Border wall impacts on terrestrial mammal communities*. National Park Service. 2023. PI (50%, with Javan Bauder).

\$99,900 *Monitoring responses by species of western bats to the arrival of White Nose Syndrome at Jewel Cave National Monument (Phase 2)*. National Park Service. 2020. PI (100%).

\$97,600 *Monitoring responses by species of western bats to the arrival of White Nose Syndrome at Jewel Cave National Monument*. National Park Service. 2019. PI (100%).

RESEARCH FUNDING - INTERNAL (Total: \$12,250)

\$12,250 *Resilience internships in southeastern Arizona*. Arizona Institute for Resilience. 2023.

AWARDS, HONORS, FELLOWSHIPS, AND OUTREACH GRANTS (Total: \$23,453)

2020 Albert R. and Alma Shadle Fellowship, American Society of Mammalogists (\$5,000)

2020 Carlton R. Barkhurst Dissertation Fellowship, University of Wyoming (\$11,153)

2020 Dean's Scholars Award, University of Wyoming College of Arts & Sciences (\$2,000)

2019 American Society of Mammalogists Travel Award (\$500)

2019 University of Wyoming Program in Ecology Travel Award (\$500)

- 2018 American Society of Mammalogists Grant-in-Aid of Research (\$1,500)
 2018 American Society of Mammalogists Travel Award (\$400)
 2018 National Science Foundation Graduate Research Fellowship Program, Honorable Mention
 2018 Society for Conservation Biology Travel Award (\$200)
 2018 University of Wyoming Department of Zoology and Physiology Travel Funding (\$350)
 2018 University of Wyoming Graduate School Travel Award (\$350)
 2017 The Wildlife Society (Wyoming Chapter) Graduate Student Scholarship (\$1,000)
 2016 Laramie Audubon Society Small Grant (\$500)

INVITED SEMINARS AND SYMPOSIA

- 2022 University of Arizona, School of Natural Resources and the Environment
 2022 Arizona Game and Fish Department
 2022 University of Arizona, School of Natural Resources and the Environment
 2021 American Society of Mammalogists, Student Awards Plenary Session

PROFESSIONAL PRESENTATIONS

- 2022 **Alston, J.M.**, C.H. Fleming, and J.M. Calabrese. American Society of Mammalogists Annual Meeting, Tucson, AZ. Oral presentation.
- 2022 **Alston, J.M.** Mississippi Bat Working Group Meeting, virtual. Oral presentation.
- 2021 **Alston, J.M.**, and J.M. Calabrese. EuroBoar Annual Meeting, virtual. Oral presentation.
- 2020 **Alston, J.M.** Wyoming Bat Working Group Annual Meeting, virtual. Oral presentation.
- 2019 **Alston, J.M.**, I.M. Abernethy, M.E. Dillon, D.A. Keinath, and J.R. Goheen. American Society of Mammalogists Annual Meeting, Washington, DC. Oral presentation.
- 2019 **Alston, J.M.**, I.M. Abernethy, D.A. Keinath, and J.R. Goheen. Ad hoc Black Hills Bat Conservation Meeting, Rapid City, SD. Oral presentation.
- 2018 **Alston, J.M.**, I.M. Abernethy, D.A. Keinath, and J.R. Goheen. Wyoming Chapter of The Wildlife Society Annual Meeting, Laramie, WY. Oral presentation.
- 2018 **Alston, J.M.**, I.M. Abernethy, D.A. Keinath, M.E. Dillon, and J.R. Goheen. North American Congress for Conservation Biology, Toronto, ON, CA. Oral presentation.
- 2018 **Alston, J.M.**, I.M. Abernethy, D.A. Keinath, M.E. Dillon, and J.R. Goheen. American Society of Mammalogists Annual Meeting, Manhattan, KS. Oral presentation.
- 2017 **Alston, J.M.**, I.M. Abernethy, D.A. Keinath, and J.R. Goheen. Wyoming Chapter of The Wildlife Society Annual Meeting, Jackson, WY. Poster.
- 2017 **Alston, J.M.**, D.A. Keinath, and J.R. Goheen. Western Bat Working Group Biannual Meeting, Fort Collins, CO. Oral presentation.

- 2015 **Alston, J.M.**, M.J. Joyce, and R.A. Moen Minnesota/Wisconsin Joint Wildlife Society Annual Meeting, Duluth, MN. Poster.
- 2014 **Alston, J.M.** and D.A. Martin. Association of Environmental Studies and Sciences Annual Conference, New York City, NY. Poster.

TEACHING EXPERIENCE

Courses

- 2024 **Instructor of Record**, University of Arizona, Collaborative Conservation (WFSC 596B) (1 semester)
- 2023-present **Instructor of Record**, University of Arizona, Wildlife Ecology, Conservation, and Management (WFSC 444/544) (1 semester)
- 2023-present **Instructor of Record**, University of Arizona, Ecology and Conservation of Animal Movement (WFSC 496B/596B) (1 semester)
- 2019, 2022 **Teaching Assistant**, University of Wyoming, Kenyan Savanna Field Course (6 weeks total)
- 2017-2020 **Teaching Assistant**, University of Wyoming, Mammalogy (ZOO 4370) (4 semesters)

Workshops

- 2021, 2023 **Co-Instructor**, The Wildlife Society, Continuous-time Movement Models (1 day each)
- 2023 **Instructor**, American Society of Mammalogists, Continuous-time Movement Models (1 day)
- 2019 **Co-Instructor**, Tanzanian Fisheries Research Institute, Statistics with R (1 week)

PROFESSIONAL SERVICE

- 2023-present **Special Features Editor**, Journal of Mammalogy
- 2023-present **Faculty Advisor**, University of Arizona Fish and Wildlife Society
- 2023-present **Member**, Awards Committee, School of Natural Resources and the Environment, University of Arizona
- 2023-present **Member**, International Wildlife Management Working Group, The Wildlife Society
- 2023-present **Member**, Native Peoples' Wildlife Management Working Group, The Wildlife Society
- 2020-present **Member**, African Research Fellowship Committee, American Society of Mammalogists (**Committee Chair** since 2023)
- 2019-present **Member**, Inclusion, Diversity, Equity, and Anti-Bias Committee, American Society of Mammalogists
- 2018-present **Member**, Biodiversity Committee, American Society of Mammalogists
- 2017-2023 **Member**, Inclusion, Diversity, Equity and Awareness Working Group, The Wildlife Society
- 2022-2023 **Member**, Ad hoc Publication Contract Committee, American Society of Mammalogists
- 2019-2021 **Member**, Preprint Editorial Team, Proceedings of the Royal Society B: Biological Science
- 2019-2021 **Member**, Finance Committee, Program in Ecology, University of Wyoming
- 2019 **Student Representative**, Department of Zoology and Physiology, University of Wyoming
- 2018 **Organizer**, CV Review Panel, University of Wyoming Chapter, The Wildlife Society
- 2017 **Speaker**, Professional Development Workshop, University of Wyoming Chapter, The Wildlife Society

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Society of Mammalogists (life member)

The Wildlife Society

REVIEW ACTIVITY

Journals (27 manuscripts at 22 journals)

African Journal of Ecology (1); American Naturalist (1); Animal Behaviour (1); Canadian Field-Naturalist (3); Ecological Applications (1); Ecological Monographs (1); Ecology Letters (1); Estuarine, Coastal and Shelf Science (1); Frontiers in Ecology and Evolution (1); Integrative & Comparative Biology (1); Journal of Animal Ecology (1); Journal of Mammalogy (3); Journal of Thermal Biology (1); Journal of Zoology (1); Landscape Ecology (1); Mammalian Biology (1); Methods in Ecology and Evolution (2); PLOS One (1); Proceedings of the Royal Society B: Biological Sciences (1); Scientific Reports (1); Trends in Ecology and Evolution (1); Wildlife Research (1)

Professional Societies

American Society of Mammalogists African Research Fellowship (3); American Society of Mammalogists Annual Meeting Student Presentations (1); American Society of Mammalogists Black and Indigenous Scholars Award (1); The Wildlife Society Annual Meeting Travel Grants (1)

MENTEES AND TRAINEES

Graduate Students

2024- Eduardo Gracia Escalante, University of Arizona (MSc) [co-advised with Javan Bauder]
 2023- Owino Otieno Raymond, University of Arizona (PhD)
 2023- Margaret Mercer, University of Arizona (MSc)
 2023- George Legrange Opiyo, Karatina University (MSc)
 2022- Celine Wandia Karoki, Kenyatta University (MSc)

Graduate Committees

2024- Brandon Mayer, University of Arizona
 2023- Alexis Rickert, University of Arizona
 2022- Ganesh Marin, University of Arizona

Honors Capstone

2023 Paige Satterfield, University of Arizona

Undergraduate Interns

2023-2024 Nadira Mitchell, University of Arizona
 2023-2024 Brian Sanchez-Fishback, University of Arizona
 2023-2024 Nikki Reck, University of Arizona
 2023 Paige Satterfield, University of Arizona

Research Technicians

2024 Paige Satterfield, University of Arizona
 2023 Jackson Tenney, University of Wyoming
 2022-2023 Daniel Batie, University of Wyoming
 2022 Jahshua Sanchez, University of Wyoming
 2022 Eric Fanning, University of Wyoming

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| 2019 | Lucas Olson, University of Wyoming |
| 2019 | Joshua Foust, University of Wyoming |
| 2018 | Emma Greene, University of Wyoming |
| 2017-2018 | Leandra Boodoo, University of Wyoming |
| 2017-2018 | Corrie McFarland, University of Wyoming |