

Abigail A. Kimmitt

Postdoctoral Fellow, Department of Ecology and Evolutionary Biology
University of Michigan

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Education

- July 2019 | **Indiana University, Bloomington**
PhD in Evolution, Ecology, and Behavior
- May 2013 | **University of Mary Washington**
BS in Biology and Environmental Science with Honors

Appointments & Experience

- 2021– | **Postdoctoral Fellow**
Department of Ecology and Evolutionary Biology, University of Michigan
Advised by Dr. Benjamin Winger
- 2021 | **Postdoctoral Research Associate**
Department of Ecology and Conservation Biology, Texas A&M University
Advised by Dr. Jacquelyn Grace
- 2020–2021 | **Postdoctoral Research Associate**
Department of Biology, Texas A&M University
Advised by Dr. Kira Delmore
- 2013–2020 | **Graduate Student**
Department of Biology, Indiana University
Advised by Dr. Ellen Ketterson
- 2012 | **NSF Research Experience for Undergraduates (REU) Internship**
Mountain Lake Biological Station, University of Virginia
Advised by Dr. Dustin Reichard and Dr. Ellen Ketterson

Fellowships, Grants, and Awards

Fellowships

- 2017 | The Avian, Wildlife, and Habitat Studies Scholarship \$10,883
- 2017 | Center for the Integrative Study of Animal Behavior Fellowship \$3,880
- 2015–2019 | National Science Foundation: Graduate Research Fellowship \$136,000

Research Grants

- 2020 | American Genetics Association Evolutionary, Ecological, or Conservation Genomics (EECG) Research Award \$8,000
- 2019 | Texas A&M Schubot Center Research Mini-grant \$2,472
- 2017 | Animal Behavior Society Student Research Grant \$1,000
- 2017 | Louis Constable Hoover Fellowship \$1,500

2016	American Ornithological Union Research Award	\$2,057
2015	Indiana Academy of Science Senior Research Award	\$2,551
2015	Indiana University Research and Teaching Preserve Research	\$500

Honors and Awards

2023	Elective Member, American Ornithological Society
2022	UMPDA Postdoc Conference Award
2017	Center for the Integrative Study of Animal Behavior William J. Rowland Mentoring Award
2015	Society for the Study of Evolution Travel Award
2015	Indiana University Biology Enrichment Travel Fund
2014–2017	Provost Women in Science Travel Award
2014, 2016	Center for the Integrative Study of Animal Behavior Travel Award

Publications

† Indicates co-first author, * Indicates undergraduate co-author

Published

15. **Kimmit, A.A.**, Pegan, T.M., Jones, A.W., Wacker, K.S., Brennan, C.L., Hudon, J., Kirchman, J., Ruegg, K., Benz, B.W., Herman, R., and Winger, B.M., 2023. Genetic evidence for widespread population size expansion in North American boreal birds prior to the Last Glacial Maximum. *Proceedings of the Royal Society B*, 290(1991), p.20221334.
14. Smiley, K.O., Lipshutz, S.E., **Kimmit, A.A.**, DeVries, M.S., Cain, K.E., George, E.M., and Covino, K.M., 2022. Beyond a biased binary: A perspective on the misconceptions, challenges, and implications of studying females in avian endocrinology. *Frontiers in Physiology*, pp. 1878
13. **Kimmit, A.A.**, Becker, D., Friedline, S., Gerlach, N.M., Rosvall, K.A., and Ketterson, E.D., 2022. Plasticity in female timing may explain earlier breeding in a North American songbird. *Journal of Animal Ecology*, 91(10), pp.1988-1998.
12. Earl, A.D.†, **Kimmit, A.A.**†, and Yorzinski, J.L., 2022. Circulating hormones and dominance status predict female behavior during courtship in a lekking species. *Integrative and Comparative Biology*, 62(1), pp.9-20
11. Terry, R.*, Ramirez, L.*, Carrera, C.*, **Kimmit, A.A.**, Delmore, K., Goulart, A., 2021. A Zugenruhe Data Collection System Using Passive Infrared Sensors. *PURSUE: Undergraduate Research Journal*, 4(1).
10. Singh, D., Reed, S.M.*, **Kimmit, A.A.**, Alford, K.A. and Ketterson, E.D., 2021. Breeding at higher latitude as measured by stable isotope is associated with higher photoperiod threshold and delayed reproductive development in a songbird. *Hormones and Behavior*, 128, pp.104907.
9. Justen, H.†, **Kimmit, A.A.**†, and Delmore, K.E., 2021. Estimating hybridization rates in the wild: easier said than done? *Evolution*, 75(8), pp.2137-2144.
8. **Kimmit, A.A.**, 2020. Females as the gatekeepers to seasonal breeding: what we can learn by studying reproductive mechanisms in both sexes. *Integrative and Comparative Biology*, 60(3), pp.703-711
7. Orr, T.J., Burns, M., Hawkes, K., Holekamp, K.E., Hook, K.A., Josefson, C.C., **Kimmit, A.A.**, Lewis, K,

Lipshutz, S.E., Lynch, K.S., Sirot, L.K., Stadtmauer, D.J., Staub, N.L., Wolfner, M.F. and Hayssen, V., 2020. It takes two to tango: including a female perspective in reproductive biology. *Integrative and Comparative Biology*, 60(3), pp.796-813

6. **Kimmit, A.A.**, Webb, A.L.*, Greives, T.J. and Ketterson, E.D., 2020. Migrant and resident female songbirds differ in gonadal response to upstream stimulation during seasonal sympatry. *General and Comparative Endocrinology*, 293, pp.113469.

5. **Kimmit, A.A.**, Sinkiewicz, D.M. and Ketterson, E.D., 2020. Seasonally sympatric songbirds that differ in migratory strategy also differ in neuroendocrine measures. *General and Comparative Endocrinology*, 285, pp.113250.

4. **Kimmit, A.A.**, Hardman, J.W.*, Stricker, C.A. and Ketterson, E.D., 2019. Migratory strategy explains differences in timing of female reproductive development in seasonally sympatric songbirds. *Functional Ecology*, 33(9), pp.1651-1662.

3. **Kimmit, A.A.**, Dietz, S.L.*, Reichard, D.G., and Ketterson, E.D., 2018. Male courtship preference during seasonal sympatry may reinforce population divergence. *Ecology and Evolution* 8(23), pp.11833-11841.

2. Reichard, D.G., **Kimmit, A.A.**, Welklin, J.F. and Ketterson, E.D., 2017. Condition-and context-dependent factors are related to courtship behavior of paired and unpaired males in a socially monogamous songbird. *The Auk*, 134(3), pp. 575-586.

1. O'Dell, D.A., Carlo, M.A., **Kimmit, A.**, Bikowski, E., Morris, K.R. and Dolby, A., 2014. A comparison of techniques measuring stress in birds. *Virginia Journal of Science*, 65(3), pp.3.

Submitted/In preparation

1. **Kimmit, A.A.**, Pegan, T.M., Jones A.W., Winker, K., and Winger, B.M. How Veeries vary: Whole genome sequencing resolves fine-scale genetic structure in a long-distance migratory bird, *Catharus fuscescens*. *bioRxiv*:<https://doi.org/10.1101/2023.07.25>. *In review for Ornithology*.

2. Pegan, T.M., Berv, J.S., Gulson-Castillo, E.R., **Kimmit, A.A.**, Winger, B.M. The pace of mitochondrial molecular evolution varies with seasonal migration distance. *In review for Evolution*.

3. **Kimmit, A.A.**, Angelier, F., and Grace, J.K. Postnatal glucocorticoid exposure predicts long-term but not permanent effects on competitive behaviors in a common songbird. *In preparation for Physiology and Behavior*.

News Coverage

2021. Ogden, L.E. How gender bias has shaped reproductive biology. *BioScience*, 71(3), pgs. 216–222. *News coverage of Integrative and Comparative Biology symposium including Kimmit, Integrative and Comparative Biology, 2020*.

2019. *Functional Ecology* blog post. “Abigail Kimmit—Seasonal sympatry and timing of reproduction in dark-eyed juncos.” *functionalecologists.com*. *News coverage of Kimmit et al., Functional Ecology, 2019*.

2018. British Ornithological Union blog post. “Males have preferences too.” <https://bou.org.uk/blog-kimmit-male-courtship-preferences>. *News coverage of Kimmit et al., Ecology and Evolution, 2018*.

Blog Posts

7. Kimmit, A.A. Becker, D.J. "Are multi-brooded birds the current 'winners' of climate change?" 2022. *Animal Ecology in Focus*. <https://animalecologyinfocus.com/2022/09/14/are-multi-brooded-birds-the-current-winners-of-climate-change/>

6. Kimmit, A.A. “Studying the genetics of migration using hybrids from a migratory divide”. 2020. *American Genetic Association Blog*. <https://blog.theaga.org/507-2/>

5. Kimmitt, A.A. "From models to the world's biodiversity: How a theoretical biologist predicts the effects of environmental change." 2019. SciU blogs. <https://blogs.iu.edu/sciu/2019/08/17/from-models-to-biodiversity/>
4. Kimmitt, A.A. "When the things we can't see matter: the plant vs. environmental change edition. 2019. SciU Blogs. <https://blogs.iu.edu/sciu/2019/04/16/plant-vs-environmental-change/>
3. Kimmitt, A.A. "How cutting-edge technology can help us understand animal migration." 2018. SciU Blogs. <https://blogs.iu.edu/sciu/2018/09/04/animal-migration/>
2. Kimmitt, A.A. "The grand challenge to prepare Indiana for environmental change... and the hope behind it". 2018. SciU Blogs. <https://blogs.iu.edu/sciu/2018/03/27/iu-grand-challenge-environment-change>
1. Kimmitt, A.A. "Climate change: Adapt or die." 2017. SciU Blogs. <https://blogs.iu.edu/sciu/2017/08/15/adapt-or-die/>

Invited Talks

- 2023 | Department of Ecology and Evolutionary Biology, University of Arizona, Tuscon, AZ.
- 2022 | Biology Department, Western Washington University, Bellingham, WA.
- 2022 | Department of Biology, West Chester University, West Chester, PA.
- 2022 | Department of Biology, University of Florida, Gainesville, FL.
- 2021 | Biology, Hamilton College, Clinton, NY.
- 2021 | Division of Biological Sciences, University of Missouri, Columbia, MO.
- 2021 | Schubot Center for Avian Health, Texas A&M University, College Station, TX.
- 2021 | Department of Biology, Lakehead University, Thunder Bay, Ontario.
- 2020 | Department of Biology, University of Louisville, Louisville, KY.
- 2020 | "Reproduction: the female perspective from an integrative and comparative approach" symposium. Society for Integrative and Comparative Biology. Austin, TX.
- 2016 | Department of Zoology, Ohio Wesleyan University. Delaware, OH.

Contributed Presentations

** Indicates undergraduate co-author*

Kimmitt, A.A., Pegan, T.M., Jones, A.W., and Winger, B.M. Comparative phylogeography reveals genetic distinctiveness of Appalachian populations of migratory boreal songbirds. American Ornithological Society Annual Meeting. August 2023. Talk.

Kimmitt, A.A., Pegan, T.M., Jones, A.W., Brennan, C.L., Hudon, J., Kirchman, J., Ruegg, K., Benz, B.W., Herman, R., and Winger, B.M. Genetic evidence for widespread population size expansion in North American boreal birds prior to the Last Glacial Maximum. *Evolution*. June 2022. Talk.

Kimmitt, A.A., F. Angelier, and J.K. Grace. The effects of early life stress on juvenile and adulthood boldness and dominance behaviors. Animal Behavior Society. Virtual conference. August 2021. Talk.

Kimmitt, A.A. and E.D. Ketterson. Migratory phenotype explains differences in female physiology in seasonally

sympatric populations. Causes and Consequences of Partial Migration Symposium. International Ornithological Congress. Vancouver, British Columbia. August 2018. Talk.

Kimmit, A.A., S.L. Dietz*, D.G. Reichard, and E.D. Ketterson. Male courtship preference is potentially adaptive in seasonally sympatric population divergence. IU CISAB Animal Behavior Conference. Bloomington, IN. April 2018. Talk.

Kimmit, A.A. and E.D. Ketterson. Differences in female reproductive timing may contribute to divergence in seasonally sympatric populations. Society for Integrative and Comparative Biology. San Francisco, CA. January 2018. Talk.

Kimmit, A.A., S.L. Dietz*, D.G., Reichard, and E.D. Ketterson. Male mate preference may reinforce population divergence in seasonally sympatric species. Society for Integrative and Comparative Biology. New Orleans, LA. January 2017. Talk.

Kimmit, A.A. and E.D. Ketterson. Do differences in female reproductive timing influence gene flow in seasonal sympatry? North American Ornithological Conference. Washington, D.C. August 2016. Poster.

Kimmit, A.A. and E.D. Ketterson. Do female differences in reproductive timing alter gene flow in heteropatric populations? Society for Integrative and Comparative Biology. Portland, OR. January 2016. Talk.

Kimmit, A.A. and E.D. Ketterson. Heteropatric speciation: How females weigh morphology and phenology when choosing mates. Guarujã, Brazil. June 2015. Poster.

Kimmit, A.A., S.L. Dietz*, and E.D. Ketterson. Does male preference play a role in subspecies divergence? Society for Integrative and Comparative Biology. January 2015. Poster.

Dietz, S.L.* **A.A. Kimmit**, and E.D. Ketterson. No conflict between extra-pair courtship and male parental behavior detected in a socially monogamous songbird. Society for Integrative and Comparative Biology. January 2015.

Kimmit, A.A. and E.D. Ketterson. Heteropatric Speciation: picking a mate over space and time. *Evolution*. Raleigh, NC. June 2014.

Kimmit, A.A., A.S. Dolby, M.A. Carlo, D.A. O'Dell. Handling prior to blood sampling related to corticosterone but not to heat shock protein 60 in the Tufted Titmouse. Society for Integrative and Comparative Biology. Austin, TX. January 2014.

Kimmit, A.A., D.G. Reichard, J.F. Welklin, and E.D. Ketterson. Differential courtship effort by mated and unmated males in a free-living songbird. Society for Integrative and Comparative Biology. San Francisco, CA. January 2013.

Teaching Experience

2023		Instructor of Record. EEB 330: Biology of Birds (16 students). University of Michigan Biological Station.
2017		Instructor of Record. BIO-Z460: Animal Behavior (42 students). Indiana University.
2014, 2015		Associate Instructor. BIO-L376: Biology of Birds (18-30 students). Indiana University.
2013		Associate Instructor. Introduction to Ecology and Evolution (12-25 students). Indiana University.

Pedagogy Training

2018-2019		Graduate Teaching Apprenticeship. Associate, Practitioner and Specialist Level. Center for Innovative Teaching and Learning, Indiana University.
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2015 | Evidence-based teaching learning community.
Center for Innovative Teaching and Learning, Indiana University.

Guest Lectures

2022 | Animal Migration Seminar. University of Michigan.
2020 | Behavioral Endocrinology Seminar. Loyola Marymount University.
2019 | BIOL-466: Principles of Evolution. Texas A&M University.
2019 | BIOL-467: Integrative Animal Behavior. Texas A&M University.
2018 | HIST-A379: The Evolution/Creation Controversy in Modern America. Indiana University.
2016 | BIO-L376: Biology of Birds. Indiana University.
2016 | BIO-L318: Evolution. Indiana University.

Workshops

2018 | “Student Centered Course Design”. Indiana University. Co-led with Leslie Drane.
2018 | “Make Lab Sessions Work”. Indiana University. Co-led with Alexis Peirce Caudell.
2016 | “Effective Lesson Design.” Indiana University. Co-led with Dr. Katherine Kearns.

Mentoring

2022–2023 | Connor Jordan, University of Michigan undergraduate
2022 | Claire Pajka, University of Michigan Post-baccalaureate
2022 | Elladiss Fuge, Aspirnaut Summer Research High School Intern
2021 | Viridiana Martinez, Texas A&M University PhD student
2020 | Mira Woods, Texas A&M University undergraduate
2019–2020 | Ashley Alairo, Texas A&M University undergraduate
2018–2019 | Susan Reed, Indiana University undergraduate
2017 | Ashlee Webb, NSF REU, Center for the Integrative Study of Animal Behavior, Indiana University
2015-2019 | Katelyn Doyle, Cox Scholar, Indiana University undergraduate
Awarded IU Research and Teaching Preserve Grant (2018) (\$1250.00)
2015-2017 | Jack Hardman, Indiana University undergraduate
2015 | Danielle (Howard) Williams, Indiana University undergraduate
2014 | Samantha Dietz, NSF REU at Mountain Lake Biological Station, University of Virginia

Professional Service

2023– | American Ornithological Society Early Professionals Committee
2023 | American Ornithological Society Student Presentation Award Competition Judge
2021 | Animal Behavior Society Founders Poster Competition Judge
2021 | Animal Behavior Society Postdoc Network Lunch Organizer
2018 | Faculty Recruitment Student Committee. Indiana University.

- 2017 | Graduate Research Fellowship (GRFP) Workshop Panelist. CIRTl Institution.
- 2015-2019 | Planning Committee for Animal Behavior Conference. Indiana University.
- 2014, 2015, 2017 | Graduate Recruitment Weekend Host. Indiana University.

Journal Reviews

The American Naturalist (1), Animal Behavior (3), Behavioral Ecology (2), BMC Genomics (1), Frontiers in Physiology (1), Integrative and Comparative Biology (2), Naturwissenschaften (1), Journal of Ornithology (1), Ornithology (1), Physiological and Biochemical Zoology (1), Proceedings of the Royal Society B (1), Royal Society Open (1), Wilson Journal of Ornithology (1)

Outreach

- 2021 | Video lab presentation for Texas A&M Ecology and Evolutionary Biology Darwin Day
- 2020 | Case study activity for Birds Canada Motus Education. *Co-designed with Dr. Kira Delmore and Hannah Justen*
- 2020 | Volunteer at Texas A&M Ecology and Evolutionary Biology Darwin Day
- 2019 | Wabash Valley Audubon Bird Festival Volunteer. Terre Haute, IN.
- 2018 | Bloomington Bird Fest Volunteer. Bloomington, IN.
- 2015-2019 | SciU Blog Writer. Indiana University.
- 2015-2017 | "Studying songbirds as a field biologist". WonderLab Science Camp. Bloomington, IN.
- 2015, 2017, 2018 | ScienceFest Volunteer. Indiana University.
- 2014 | Mentoring high school student in a research class. Harmony School. Bloomington, IN.
- 2014 | ESA Seeds Program. Mountain Lake Biological Station, University of Virginia.
- 2014 | Mentoring undergraduates in lesson design for AP Biology. Indiana University.

Professional References

Ellen Ketterson, PhD
PhD advisor
Distinguished Professor, Indiana University
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