

Abigail A. Kimmitt, PhD

Email: akimmitt@umich.edu / Phone: (410) 206 - 8396
Website: www.abbykimmitt.com / Twitter: @AbbyKimmitt

EDUCATION

Indiana University, Bloomington, IN
Ph.D. in Ecology, Evolution, and Behavior, July 2019

University of Mary Washington, Fredericksburg, VA
Bachelor of Science in Biology with Honors, May 2013
Double Major in Environmental Science

RESEARCH EXPERIENCE

Postdoctoral Research Associate, 2021-present
University of Michigan, Department of Ecology and Evolutionary Biology
Advisor: Dr. Benjamin Winger

Postdoctoral Research Associate, 2021
Texas A&M University, Department of Ecology and Conservation Biology
Advisor: Dr. Jacquelyn Grace
Project title: Behavioral responses to early-life stress in songbirds

Postdoctoral Research Associate, 2019-2020
Texas A&M University, Department of Biology
Advisor: Dr. Kira Delmore
Project title: Molecular basis of divergent migratory behavior in a songbird hybrid zone

Doctoral Dissertation Research, 2013- 2019
Indiana University, Bloomington, Evolution, Ecology and Behavior Program (EEB)
Advisor: Dr. Ellen Ketterson
Project Title: Physiological and behavioral mechanisms of population divergence in seasonal sympatry

Undergraduate Honors Thesis Research, 2011-2013
University of Mary Washington, Department of Biology
Advisor: Dr. Andrew Dolby
Project title: The effect of handling time on stress responses in the Tufted Titmouse

NSF Research Experience for Undergraduates (REU) Internship, Summer 2012
Mountain Lake Biological Station, University of Virginia
Advisor: Dustin Reichard and Dr. Ellen Ketterson
Project Title: Predictors of courtship effort in male dark-eyed juncos

PUBLICATIONS

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

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. 2020. Estimating hybridization rates in the wild: easier said than done? *Evolution*. <https://doi.org/10.1111/evo.14082>
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

News Coverage:

- Bioscience: [“How gender bias has shaped reproductive biology”](#)

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.

News Coverage:

- functionalecologists.com: [“Abigail Kimmit – Seasonal sympatry and timing of reproduction in dark-eyed juncos.”](#)

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.

News Coverage:

- bou.org.uk: [“Males have preferences too”](#)

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.

In prep/ review

1. **Kimmit, A.A.**, Becker, D., Friedline, S., Gerlach, N.M., Rosvall, K.A., and Ketterson, E.D. Plasticity in female timing may explain shifts in breeding phenology of a multi-brooded North American songbird. *In revision*.
2. Earl, A.D. †, **Kimmit, A.A.** †, and Yorzinski, J.L. Dominance status and circulating hormones predict peahen behavior in a courtship context. *In prep*.

Blog Posts

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. Kimmit, 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. Kimmit, 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. Kimmit, 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. Kimmit, 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. Kimmit, A.A. “Climate change: Adapt or die.” 2017. SciU Blogs. <https://blogs.iu.edu/sciu/2017/08/15/adapt-or-die/>

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. Mountain Lake Biological Station Fellowship: Johns Creek Endowment Fund (\$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 Grant (\$500)

FELLOWSHIPS AND AWARDS

- 2017. Center for the Integrative Study of Animal Behavior William J. Rowland Mentoring Award
- 2017. The Avian, Wildlife, and Habitat Studies Scholarship (\$10,883)
- 2017. Center for the Integrative Study of Animal Behavior Fellowship (\$3,880)
- 2015. National Science Foundation: Graduate Research Fellowship (\$136,000)
- 2012. National Science Foundation: Research Experience for Undergraduates (\$5,000)

INVITED TALKS

- 2021. University of Missouri, Columbia, MO.
- 2021. Schubot Center for Avian Health, Texas A&M University, College Station, TX.
- 2021. Lakehead University, Thunder Bay, Ontario.
- 2020. University of Louisville, Louisville, KY.
- 2020. Society for Integrative and Comparative Biology. "Reproduction: the female perspective from an integrative and comparative approach" symposium. Austin, TX.
- 2016. Ohio Wesleyan University. Delaware, OH. November 2016.

CONFERENCE PRESENTATIONS

* Indicates undergraduate co-author

13. **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.
12. **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.
11. **Kimmitt, 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.
10. **Kimmitt, 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.
9. **Kimmitt, 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.
8. **Kimmitt, 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.
7. **Kimmitt, 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.
6. **Kimmitt, A.A.** and E.D. Ketterson. Heteropatric speciation: How females weigh morphology and phenology when choosing mates. Guarujã, Brazil. June 2015. Poster.
5. **Kimmitt, 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.
4. Dietz, S.L. * **A.A. Kimmitt**, 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.
 3. **Kimmitt, A.A.** and E.D. Ketterson. Heteropatric Speciation: picking a mate over space and time. Evolution. Raleigh, NC. June 2014.
 2. **Kimmitt, 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.
 1. **Kimmitt, 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

Instructor of Record. *BIO-Z460*: Animal Behavior (42 students). Indiana University. Fall 2017.
Associate Instructor. *BIO-L376*: Biology of Birds (18-30 students). Indiana University. Fall 2014, Spring 2015.
Associate Instructor. *BIO-L111*: Introduction to Ecology and Evolution (12-25 students). Indiana University. Fall 2013.

Training

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

Guest Lectures

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.

UNDERGRADUATE STUDENT MENTORING

Mira Woods, Texas A&M University undergraduate (2020)
Ashley Alairo, Texas A&M University undergraduate (2019-2020)

Susan Reed, Indiana University undergraduate. Honor Thesis Writing Mentor (2018)
Ashlee Webb, NSF REU, Center for the Integrative Study of Animal Behavior (CISAB),
Indiana University, Bloomington (2017)
Katelyn Doyle, Cox Scholar, Indiana University undergraduate (2015-2019); *Awarded IU
Research and Teaching Preserve Grant (2018) (\$1250.00)*
Jack Hardman, Indiana University undergraduate (2015-2017)
Danielle (Howard) Williams, Indiana University undergraduate (2015)
Samantha Dietz, NSF REU at Mountain Lake Biological Station, University of Virginia (2014)

SERVICE

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, 2016, 2017. Graduate Recruitment Weekend Host. Indiana University.

JOURNAL REVIEWS

The American Naturalist (1), Animal Behavior (3), Behavioral Ecology (1), Integrative and
Comparative Biology (2), Naturwissenschaften (1), Journal of Ornithology (1), Physiological
and Biochemical Zoology (1), Wilson Journal of Ornithology (1)

OUTREACH

2021. Video lab presentation for Texas A&M Ecology and Evolutionary Biology Darwin Day
2020. Co-designed case study activity for Birds Canada Motus Education.
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.
2017- 2019. ScIU Blog Writer. Indiana University.
2015-17. "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.