**Jennifer J. Uehling**

Assistant Professor • Department of Biology

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**EDUCATION**

**Ph.D., Ecology and Evolutionary Biology**

Cornell University, 2023

Advisor: Maren N. Vitousek

**B.S., Biological Sciences (specialization: Ecology and Evolution)**

**B.A., Environmental Studies with Honors**

The University of Chicago, 2015

Cumulative GPA: 3.90/4.00

Advisor: Stephen Pruett-Jones

**PROFESSIONAL APPOINTMENTS**

**Assistant Professor, West Chester University**, 2023-present

**PUBLICATIONS**

\* Indicates undergraduate co-author, # Indicates equal authorship

**Accepted publications and book chapters**:

**12**. Taff, C. C., S. McNew, C. Zimmer, **J. J.** **Uehling**, T. A. Ryan, D. Chang van Oordt, J. L. Houtz, A. S. Injaian, and M. N. Vitousek. Social signal manipulation and environmental challenges have independent effects on physiology, internal microbiome, and reproductive performance in tree swallows (*Tachycineta bicolor*). *Journal of Experimental Zoology Part A* 339(8):723-735.

**11**. Dunn, P., et al. (including **J. J. Uehling** and O. Rooney\*) (2023). Extensive regional variation in the phenology of insects and their response to temperature across North America. *Ecology* 104:e4036.

**10**. Vitousek, M. N., J. L. Houtz, M. A. Pipkin, D. A. Chang van Oordt, K. K. Hallinger, **J. J. Uehling**, C. Zimmer, and C. C. Taff (2022). Natural and experimental cold exposure increase the sensitivity to future stressors in a free-living songbird. *Functional Ecology* 36(10):2531-2543.

**9**. Taff, C. C., B. Johnson\*, A. T. Anker\*, A. M. Rodriguez, J. L. Houtz, **J. J. Uehling**, and M. N. Vitousek (2022). No apparent trade-off between the quality of nest-grown feathers and time spent in the nest in an aerial insectivore, the tree swallow. *Ornithology* 139(3):1-13.

**8**. Injaian, A. S., **J. J. Uehling**, C. C. Taff, and M. N. Vitousek (2021). Effects of artificial light at night on avian provisioning, corticosterone, and reproductive success. *Integrative and Comparative Biology* 61(3):1147-1159.

**7. Uehling, J. J.**, J. Tallant, and S. Pruett-Jones (2021). Introduced and naturalized parrots in the United States. In S. Pruett-Jones (ed) *Naturalized Parrots of the World: Distribution, Ecology, and Impacts of the World's Most Colorful Colonizers*. Princeton: Princeton University Press.

**6**. Houtz, J. L.#, R. Mady#, and **J. J. Uehling#** (2021). A virtual bird’s eye view: Live streaming nest boxes to continue outreach in the era of COVID-19. *Ecology and Evolution* 11(8):3559-3564.

**5**. Genova, L. A., B. B. Johnson, F. R. Castelli, L. M. Arcila Hernández, D. A. Chang van Oordt, A. Demery, N. K. Fletcher, E. M. Goud, K. D. Holmes, J. L. Houtz, M. M. Howard, J. J. Hughes, K. H. Jensen, H. D. Kunerth, E. P. Law, E. Lombardi, A. Mazo-Vargas, C. A. McDonald, C. S. Mittan, T. A. Ryan, A. M. Tracy, **J. J. Uehling**, A. K. Weiss, and M. K. Smith (2020). What is speciation, how does it occur, and why is it important for conservation? *CourseSource* 7:1-19.

**4.** Winkler, D. W., K. Nesbitt, M. Andersen, D. Ardia, A. Belmaker, D. Chang van Oordt, V. Ferretti, A. Forsman, J. Gaul, P. Llambías, S. Orzechowski, T. Pegan, J. Shipley, M. Stager, C. Taff, **J. Uehling**, M. Verhoeven, M. Vitousek, M. Wilson, and H. S. Yoon. (2020). Full lifetime perspectives on the costs and benefits of lay date variation in tree swallows. *Ecology* 101(9):e03109.

**3. Uehling, J. J.**, C. C. Taff, D. W. Winkler, and M. N. Vitousek (2020). Developmental temperature predicts the adult response to stressors in a free-living passerine. *Journal of Animal Ecology* 89(3):842-854.

**Covered by**: [Cornell Chronicle](https://news.cornell.edu/stories/2019/12/young-tree-swallows-carry-environmental-stress-adulthood)

**2. Uehling, J. J.**, J. Tallant, and S. J. Pruett-Jones (2019). Status of naturalized parrots in the United States. *Journal of Ornithology* 160(3):907-921.

**Covered by**: [Audubon](https://www.audubon.org/news/exotic-parrot-colonies-are-flourishing-across-country), [Gizmodo](https://gizmodo.com/feral-parrots-are-taking-over-america-1834763132), [Science Daily](https://www.sciencedaily.com/releases/2019/05/190514162206.htm), [Scientific American](https://www.scientificamerican.com/podcast/episode/parrots-are-making-the-u-s-home/), [Sierra](https://www.sierraclub.org/sierra/non-native-parrots-have-naturalized-across-united-states), [Smithsonian Magazine](https://www.smithsonianmag.com/smart-news/escaped-pet-parrots-are-doing-great-wild-180972185/), [UChicago Medicine](https://news.uchicago.edu/story/escaped-pet-parrots-are-now-naturalized-23-us-states-study-finds)

**1.** Vitousek, M. N., M. A. Johnson, J. W. Donald, C. D. Francis, M. J. Fuxjager, W. Goymann, M. Hau, J. F. Husak, B. K. Kircher, R. Knapp, L. B. Martin, E. T. Miller, L. A. Schoenle, **J. J. Uehling**, and T. D. Williams (2018). HormoneBase: A population-level database of steroid hormone levels across vertebrates. *Scientific Data* 5:1800097.

**Manuscripts submitted, in review, or in revision**:

Hallinger, K. K., T. M. Pegan, M. J. Andersen, D. R. Ardia, A. Belmaker, D. Chang van Oordt, V. Ferretti, A. M. Forsman, J. R. Gaul, P. E. Llambias, S. C. Orzechowski, J. R. Shipley, M. Stager, C. C. Taff, **J. J. Uehling**, M. Verhoeven, M. Vitousek, M. Wilson, H. S. Yoon, P. H. Wrege, and D. W. Winkler. Comparing the reproductive performance of dispersers vs. non-dispersers: a point-of-settlement approach to understanding the diversity of tree swallow dispersal strategies in a continuous mainland environment. Submitted.

McNew, S. M., C. C. Taff, C. Zimmer, **J. J. Uehling**, T. A. Ryan, D. Chang van Oordt, J. L. Houtz, A. S. Injaian, and M. N. Vitousek. Developmental stage-dependent effects of perceived predation risk on physiology and fledging success of tree swallows (Tachycineta bicolor). In review.

Miller, C. R., C. C. Taff, **J. J. Uehling**, A. P. Rose, and M. N. Vitousek. Moonlight intensity affects the timing and duration of parental behavior across latitudes in a diurnal songbird. In review.

Taff, C. C., T. A. Ryan, **J. J. Uehling**, A. S. Injaian, and M. N. Vitousek. Within-individual consistency and among-individual variation in shapes of tree swallow (*Tachycineta bicolor*) eggs are unrelated to reproductive success. In review.

**Uehling, J. J.**, C. C. Taff, J. L. Houtz, P. M. Becker\*, A. S. Injaian, and M. N. Vitousek. Predictors and consequences of diet variation in a declining generalist aerial insectivore. In revision.

**Manuscripts in prep**:

Somoza, B.\*, M. N. Vitousek, **J. J. Uehling**, C. C. Taff, and J. L. Houtz. Natural gut microbiome diversity is negatively correlated with body mass and stress responsiveness in a songbird. In prep, full draft available.

**Uehling, J. J.**, J. L. Houtz, M. A. Pipkin, P. M. Becker\*, C. C. Taff, and M. N. Vitousek. A simulated hormonal stress response alters foraging decisions in a declining free-living passerine. In prep, full draft available.

**TEACHING EXPERIENCE**

**Instructor of Record**:

2023 **BIOEE 1640 FWS: The female birds’ eye view: Women’s voices in ornithology**

*Instructor, Cornell University*

2021 **BIOEE 1640 FWS: Migration and Moonbirds: Animal Movement Over Space and Time**

*Instructor, Cornell University*

**Teaching Assistant**:

2022, 2018 **BIOEE 4750 Ornithology**

*Teaching Assistant, Cornell University*

2019 **BIOS 23252 Field Ecology**

*Lab Teaching Assistant, University of Chicago*

2019 **WRIT 7101 Teacher Training in Writing in the Majors (WIM) Courses**

*Co-facilitator, Cornell University*

2017 **BIOEE 3610 Advanced Ecology**

*Teaching Assistant, Cornell University*

2015 **EEB 392 Natural History and Evolution**

*Teaching Assistant, University of Michigan Biological Station*

2015 **ENST 13132 Environmental Ecology**

*Teaching Assistant, University of Chicago*

2013 **BIOS 10130 Core Biology**

*Writing Teaching Assistant, University of Chicago*

**Guest Lectures**:

2022 Do birds stress eat? Tree swallow diet variation in a challenging world (*in Animal Behavior, SUNY ESF*)

2020 Native Ithaca Birds and Strategic Planning for Careers in Ecology (*in Field Ecology, Cornell University*)

2019 Naturalized Parrots in the United States (*in Urban Ecology: The Nature of Our Cities, Cornell University*)

**UNDERGRADUATE MENTORING**

**Cornell Undergraduate Honors Thesis Mentees**:

**Paige Becker** (2019-2021): field assistant working on tree swallow breeding biology project (2019 and 2021), lab assistant working on fecal sample DNA extractions (2019-2021), co-mentored by me and Maren Vitousek for her honors thesis. Awarded the Cornell Undergraduate Research Program grant ($500) and the Cornell Einhorn Discovery Grant ($500).

**Audrey Su** (2022-present): field assistant working on tree swallow breeding biology project (2022 and 2023), co-mentored by me and Maren Vitousek for her honors thesis. Awarded the Rawlings Cornell Presidential Research Scholarship award.

**Cornell Undergraduate Independent Research Mentees**:

**Allison Anker**: lab assistant working on feather measurements and fecal sample DNA extractions (2019-2020). Awarded Hatch/Multistate Funds for Undergraduate Student Research ($1,000).

**Raquel Castromonte**:field assistant on tree swallow breeding biology project (2019), lab

assistant working on fecal sample DNA extractions (2019-2020).

**Kai Chen**: field assistant working on tree swallow breeding biology project (2019), lab assistant working on fecal sample DNA extractions (2019-2020).

**Emma Regnier**: field assistant on sanderling movement ecology project and tree swallow breeding biology project (2018), research assistant examining patterns of hormone levels across birds with different migratory strategies (2018-2019).

**Olivia Rooney**: field assistant working on insect collection (2021), lab assistant working on insect identification and biomass quantification (2021-2022).

**Bella Somoza**: field assistant working on tree swallow breeding biology project (2019), lab assistant working on fecal sample DNA extractions (2019-2020).

**MENTORING PROGRAMS**

**Graduate Instructor Peer Mentoring**:

2022-2023 **Science-focused First-year Writing Seminar (FWS) Peer Teaching Mentor**

*John S. Knight Institute for Writing in the Disciplines, Cornell University*

I mentored graduate students serving as instructors of record for science-focused FWS courses. I co-led a workshop for new instructors, collated materials and resources shared by previous instructors for future instructors, and gave new instructors guidance at bi-weekly support meetings.

**Undergraduate Mentoring**:

2019-2023 **Vitousek Lab Undergraduate Research & Professional Development Seminar**

*Cornell University, Department of Ecology and Evolutionary Biology*

I co-ran a bi-weekly seminar for undergraduates conducting research in the Vitousek Lab. During these meetings, we guided discussions on reading and digesting scientific literature and led professional development workshops.

**GRANTS, FELLOWSHIPS, AND AWARDS**

**Research Grants (Total: $33,839)**:

2021 Cornell Sigma Xi Chapter Grant ($800)

2020 Andrew W. Mellon Student Research Grant, Cornell University ($1,000)

2020 Cornell Sigma Xi Chapter Grant ($800)

2020 Society for Integrative and Comparative Biology Grants-in-Aid of Research ($1,000)

2019 Cornell Lab of Ornithology Athena Fund ($4,500)

2019 Sustainable Biodiversity Fund, Cornell Atkinson Center for Sustainability ($7,500)

2019 Cornell Sigma Xi Chapter Grant ($800)

2019 Cornell Lab of Ornithology Athena Fund ($5,860)

2018 Andrew W. Mellon Student Research Grant, Cornell University ($1,000)

2018 Cornell Sigma Xi Chapter Grant ($500)

2018 Cornell Lab of Ornithology Athena Fund ($5,329)

2017 Paul P. Feeny Graduate Student Research Fund, Cornell University ($950)

2017 Cornell Sigma Xi Chapter Grant ($800)

2017 Andrew W. Mellon Student Research Grant, Cornell University ($1,000)

2017 Cornell Lab of Ornithology Athena Fund ($2,000)

**Outreach Grants (Total: $250)**:

2019 Cornell College of Agriculture and Life Sciences Alumni Association Grant ($250)

**Conference Travel Grants ($3,838)**:

2023 Cornell Graduate School Conference Travel Grant Award ($400)

2022 American Ornithology Society Travel Award ($60)

2021 Cornell Graduate School Conference Travel Grant Award ($515)

2019 Cornell Graduate School Conference Travel Grant Award ($360)

2018 Cornell Graduate School Conference Travel Grant Award ($440)

2017 Western Hemisphere Shorebird Group Conference Travel Grant ($963)

2017 Orenstein Endowment Fund, Cornell University ($1,000)

2017 Cornell Graduate School Conference Travel Grant Award ($440)

2016 North American Ornithological Conference VI Travel Award ($60)

**Awards**:

2022 Mark E. Hauber Student Presentation Award, given for the best oral presentation on avian behavior, American Ornithological Society (AOS) annual conference

2015 Phi Beta Kappa, University of Chicago

2014-2015 Student Marshal, University of Chicago

2012-2014 University Athletic Association All-Academic Recognition

**Fellowships (Total: $168,698)**:

2022 Cornell Lab of Ornithology Fellowship ($14,500)

2022 Ivy and Schnoor Graduate Fellowships at the Cornell Lab of Ornithology ($6,367)

2021 Charlie E. Treman, Jr. Graduate Fellowship at the Cornell Lab of Ornithology ($6,233)

2018-2021 National Science Foundation Graduate Research Fellowship ($102,000)

2017 Ivy Graduate Fellowship at the Cornell Lab of Ornithology ($5,300)

2016-2017 Presidential Life Sciences Fellowship, Cornell University ($34,298)

**SELECTED PRESENTATIONS**

\* Indicates undergraduate co-author

2023 **Uehling, J. J.**, A. S. Injaian, C. C. Taff, D. W. Winkler, and M. N. Vitousek. Do glucocorticoids predict movement? Observational and experimental studies in a free-living bird. Society for Integrative and Comparative Biology, Austin, TX (Talk)

2022 **Uehling, J. J.**, C. C. Taff, J. L. Houtz, P. M. Becker\*, A. S. Injaian, and M. N. Vitousek. Predictors and consequences of diet variation in a declining generalist aerial insectivore. Association of Field Ornithologists, Plymouth, Massachusetts (Talk)

2022 **Uehling, J. J.**, J. L. Houtz, M. A. Pipkin, P. M. Becker\*, C. C. Taff, and M. N. Vitousek. A simulated hormonal stress response alters foraging decisions in a declining aerial insectivore. American Ornithological Society and Birds Caribbean Conference, San Juan, Puerto Rico (Talk)

*Winner of the Mark E. Hauber Student Presentation Award, given for the best oral presentation on avian behavior.*

2022 **Uehling, J. J.**, J. L. Houtz, M. A. Pipkin, P. M. Becker\*, C. C. Taff, and M. N. Vitousek. A simulated hormonal stress response alters foraging decisions in a declining free-living passerine. Society for Integrative and Comparative Biology, Phoenix, AZ (Talk)

*Finalist for the Division of Comparative Endocrinology Best Student Presentation: Aubrey Gorbman Award.*

2021 **Uehling, J. J.**, C. C. Taff, J. L. Houtz, P. M. Becker\*, and M. N. Vitousek. DNA metabarcoding reveals predictors of diet quality variation in Tree Swallows (*Tachycineta bicolor*). American Ornithological Society and Society of Canadian Ornithologists, Virtual (Talk)

2020 **Uehling, J. J.**, J. Tallant, and S. Pruett-Jones. Introduced and Naturalized Parrots in the USA: Arrival, Geographic Distribution, and Current Status. North American Ornithological Conference, Virtual (Talk)

2020 **Uehling, J. J.**, A. Injaian, C. C. Taff, D. W. Winkler, and M. N. Vitousek. CORT and light pollution affect movement behavior in a free-living passerine. Society for Integrative and Comparative Biology, Austin, TX (Talk)

2019 **Uehling, J. J.**, C. C. Taff, and M. N. Vitousek. Early life conditions influence adult response to stressors in a free-living passerine. Society for Integrative and Comparative Biology, Tampa, FL (Talk)

2018 **Uehling, J. J.**, C. C. Taff, and M. N. Vitousek. Natal environment influences adult stress responsiveness in free-living birds. Society for Integrative and Comparative Biology, San Francisco, CA (Poster)

2017 **Uehling, J. J.**, M. Lanzone, C. Halverson, S. Blackshire, R. Porter, and D. W. Winkler. A new 3D-printed harness for attachment of lifetime tracking devices to shorebirds. Western Hemisphere Shorebird Group Conference, Paracas, Peru (Poster)

2017 **Uehling, J. J.**, D. Fink, W. Hochachka, and D. W. Winkler. Using eBird citizen science to detect local avian movements in response to short-term temperature variation. Gordon Research Conference: Movement Ecology of Animals, Ventura, CA (Poster)

2016 **Uehling, J. J.**,J. Tallant, and S. Pruett-Jones. Naturalized Parrots in the United States: Biophysical and Anthropogenic Influences on Their Distribution. North American Ornithological Conference, Washington D.C. (Talk)

**INVITED OUTREACH TALKS**

2021 Naturalized Parrots in the USA. Bucks County Birders

2020 Naturalized Parrots in the USA. Delaware Valley Ornithological Club

2018 Where do the birds go? Southern Ocean Birding Group

2018 Where do the birds go? Tracking migratory shorebirds. Long Beach Island Foundation for Arts and Sciences

2017 Hippoboscid Flies and Their Avian Hosts. Delaware Valley Ornithological Club

**TRAINING AND PROFESSIONAL DEVELOPMENT**

2020, 2023 **Inclusive Teaching for LGBTQ+ Students**, Cornell Biodiversify

2022 **Book Club: The Gayogo̱hó:nǫ' People in the Cayuga Lake Region: A Brief History**, Cornell Lab of Ornithology

2021 **Teaching Writing**, John S. Knight Institute for Writing in the Disciplines, Cornell University

2021 **Science Communication Workshop**, Cornell University

2020 **Diversity, Equity, & Inclusion in STEM: The Science Behind Bias Seminar**, Department of Entomology, Cornell University

2019 **Special Topics in Ecology and Evolution: Evidence-Based Teaching**, Department of Ecology and Evolutionary Biology, Cornell University

2019 **Building Mentoring Skills for an Academic Career**, Center for the Integration of Research, Teaching, and Learning, Cornell University

2018 **Teacher Training in Writing in the Majors Courses**, John S. Knight Institute for Writing in the Disciplines, Cornell University

**PROFESSIONAL SERVICE**

2018-present **Reviewer**, *Biological Invasions, Journal of Animal Ecology, Journal of Zoology, Movement Ecology, Proceedings of the Royal Society B*

2020-2023 **Science-Communication Working Group**, Cornell Lab of Ornithology: Keep Lab communications team informed about graduate student research accomplishments so that they can be covered by media.

2020-2023 **Monthly Series Sub-committee**, American Ornithological Society Student Affairs Committee: Organize virtual workshops and networking opportunities for student members.

2020-2023 **Equity in Hiring Practices Committee**, Cornell Department of Ecology and Evolutionary Biology: Review current department hiring practices, from the undergraduate level to the faculty level, and make recommendations for promoting diversity, equity, and inclusion in hiring.

2020-2021 **Workshop Committee**, Cornell Department of Ecology and Evolutionary Biology: Coordinated virtual skills-building and professional development workshops for graduate students and postdocs during the COVID-19 pandemic.

2017-2021 **Recruitment Committee**, Cornell Department of Ecology and Evolutionary Biology: Coordinated department’s graduate student recruitment weekend, including meals, tours of campus, graduate student panels, and faculty and student talks.

2019-2020 **Organismal Biologist Faculty Search Graduate Advisory Committee**, Cornell Department of Ecology and Evolutionary Biology: Served as one of two graduate student assistants to the graduate voting member of the committee. Attended all search committee meetings, produced summary data about applicant pool, and coordinated meetings with graduate student body to communicate progress of search.

2019 **NSF GRFP Peer Reviewer**, Cornell: Peer reviewed GRFP applicants’ personal and research statements.

**VOLUNTEER AND OUTREACH ACTIVITIES**

2019-2023 **Bird Biology Course**,Belle Sherman Elementary School: Organize and teach a year-long course for 5th graders. Visit multiple times throughout the year to set up and monitor nest boxes at school and teach students about bird biology. During COVID-19, developed virtual lessons.

2017-2023 **Diversity Preview Weekend (DPW) volunteer**, Cornell: Serve as volunteer to plan and execute annual DPW, an event to inform underrepresented minorities in STEM about the graduate school application process. In 2020 and 2021, led workshop for participants, “Strategic Planning for Graduate School.”

2020, 2021 **Graduate Women’s Athletic Association Networking Night**, University of Chicago: As a student-athlete alumnus, met with current women student-athletes and discussed how to leverage athletics in interviews, how to apply to graduate school.

2020 **Cornell** **Undergraduate Research Board’s graduate student virtual networking night**, Cornell: During COVID-19 pandemic, virtually networked with undergraduates at Cornell to tell them about my research and give them insight into finding research positions.

2020 **Ask a Scientist**, Asheville Museum of Science: During COVID-19 pandemic, spent one hour presenting and answering questions about ornithology field techniques and my research, with almost 200 people watching via Facebook Live.

2020 **Office of Undergraduate Biology** **lab tour for freshmen**, Cornell: Gave a tour of the Vitousek lab to first year undergraduates interested in research, half of which were underrepresented minorities in STEM.

2019, 2020 **Office of Undergraduate Biology speed networking with biology undergraduates**, Cornell: Participated in event to inform undergraduates about biology research opportunities and give them insight into how to start research positions.

2018, 2019, **Migration Celebration**, Cornell Lab of Ornithology: Organized and ran table for

2022 the Vitousek lab about tree swallow migration for Migration Celebration, an event open to the public.

2017-2019 **Expanding Your Horizons (EYH)**, Cornell: Assisted in ornithology workshop for 7th-9th grade women (2017); co-led and organized workshop, which included bird mist-netting and banding demonstration and a game to teach students about foraging and caching behavior (2018, 2019).

2016-2019 **Graduate Student School Outreach Program (GRASSHOPR)**, Cornell:

Developed mini course about bird biodiversity and ecology for elementary school students; selected as teaching fellow and matched with 5th grade teachers at local public school, taught course for three years.

**PROFESSIONAL MEMBERSHIPS**

**American Ornithologists’ Union/American Ornithological Society** (2016-present)

**Delaware Valley Ornithological Club** (2016-present)

**Sigma Xi** (2016-present)

**Society for Integrative and Comparative Biology** (2017-present)

**SKILLS AND LEADERSHIP**

**Athletics**: Competed in four years of varsity cross country and track and field at University of Chicago, serving as captain senior year. Achieved All-Academic status from U.S. Track & Field and Cross Country Coaches Association based on academic performance and ranking in top 25 nationally. Served as secretary and then co-vice president of Women’s Athletic Association at University of Chicago.

**Coaching**: Coached Ithaca Youth Bureau cross country and track for runners ages 5-12 (2019-2023).

**LANGUAGES**

English (native), Spanish (conversational)