

CHRISTINE M. STRACEY

Department of Biology

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EDUCATION

Ph.D., Biology (January 2010, Expected)

University of Florida, Gainesville, FL

Dissertation Title: Patterns and processes in urban bird communities.

Chair: Dr. Scott K. Robinson, Ordway Eminent Scholar of Ecosystem Conservation

M.A., Conservation Biology (2002)

Columbia University, New York, NY

Thesis Title: Testing the Equilibrium Theory of Island Biogeography: immigration rates of birds on British islands.

Chair: Dr. Stuart L. Pimm, Professor of Conservation Biology

B.S., Biology, Chemistry Minor, *cum laude* (2000)

The College of New Jersey, Ewing, NJ

TEACHING EXPERIENCE

Head Teaching Assistant, *Accelerated Integrated Principles of Biology Lab*, Department of Biological Sciences, University of Florida (Fall 2009)

Accelerated introductory laboratory for biology majors. Implemented lab activities and assisted in curriculum design to enhance cross-disciplinary (biology, chemistry, physics) nature of inquiry-based lab with 16 students per section.

Teaching Assistant, *Cells, Organisms, & Genetics – Online Course*, Department of Biological Sciences, University of Florida (Spring 2009)

Introductory lecture for non-biology majors. Assisted with implementation of pilot version of online course of 150 students. Helped design online activities and discussion questions. Conducted live online “Elluminate” discussions. Managed grades, activities, and discussions in E-learning environment. Provided feedback on each week’s content for future improvements in course.

Instructor, *Cells, Organisms, & Genetics*, Department of Biological Sciences, University of Florida (Fall 2007, 2008)

Introductory lecture for non-biology majors. Designed syllabus, wrote and delivered three lectures per week, wrote and administered exams, quizzes, and discussions for 75-100 students.

Teaching Assistant, *Lab in Biological Sciences*, Department of Biological Sciences, University of Florida (Spring, Summer 2008)

Implemented laboratory activities for non-biology majors, wrote and graded quizzes and exams for 14 students per section.

Teaching Assistant, *Avian Biology*, Department of Zoology, University of Florida (Spring 2007)

Upper level lecture and laboratory course for biology and wildlife majors. Led lab sections, conducted field trips, wrote and graded exam questions, gave guest lectures for class of 24 students.

Teaching Assistant, *Ecology*, Department of Zoology, University of Florida (Fall 2006)

Upper level lecture and laboratory course for biology and wildlife majors. Designed and implemented lab and field experiments, wrote and graded exam questions, gave guest lectures for class of 50 students.

Teaching Assistant, *Introductory Biology Lab*, Department of Biological Sciences, University of Florida (Fall 2003, Spring 2004, Fall 2005, Summer 2006, 2007)

Introductory laboratory for biology majors. Designed and implemented laboratory and field experiments, wrote and graded quizzes for 18 students per section.

Discussion Leader, *Introductory Biology*, Department of Biological Sciences, University of Florida (Spring 2006)

Introductory lecture for biology majors. Lead discussion sections of biology lecture with 300 students per section. Attended lecture and assisted with exam writing and grading.

Curriculum Developer, *Introductory Biology Lab*, Department of Biological Sciences, University of Florida (Summer 2005, Fall 2006)

Revised and rewrote lab manual for Introductory Biology 2 lab for biology majors. Designed lab assignments to incorporate inquiry-based activities. Led teaching assistant meetings to communicate changes and new teaching strategies to the teaching assistants for the course. Developed teaching assistant note packets for each lab.

NSF GK-12 “Fellow”, *7th Grade Integrated Science*, Lincoln Middle School, Gainesville, FL (June 2004 – June 2005)

Participated in Science Partners in Inquiry-based Collaborative Education (S.P.I.C.E.). Team-taught inquiry-based science with an emphasis on ecosystem health with 7th grade classroom teacher. Designed labs and activities and implemented them in classroom two full days a week. Designed a module on Invasive Species available online at <http://www.spice.centers.ufl.edu/Modules.html> and published one of the activities (Stracey 2008). Took a graduate course in teaching science methods.

Teaching Assistant, *Ornithology*, Department of Animal Biology, University of Illinois Champaign-Urbana (Spring 2003)

Upper level lecture and laboratory for biology and wildlife majors. Taught lab sections and conducted field trips for 12 students per section.

Teaching Assistant, *Environmental Biology*, Department of Animal Biology, University of Illinois Champaign-Urbana (Fall 2002)

Introductory lecture for non-biology majors. Maintained class website, converted lectures to powerpoint presentations, wrote exam questions, and held office hours and review sessions for 500+ student lecture.

Private Tutor, (2005 – present)

Tutored individuals and small groups in biology courses at University of Florida.

Tutor, Academic Enhancement Center, The College of New Jersey (1998 – 2000)

Tutored fellow students in General and Organic Chemistry.

MENTORING EXPERIENCE

Howard Hughes Medical Institute (H.H.M.I.) Mentoring Program (2009 – 2010)

Participated in one-year Group Advantaged Training of Research (G.A.T.O.R.) program in which graduate students learn to mentor undergraduate students in research. All participants, including undergraduates, submit research proposals for funding, conduct independent research, present their research at a professional conference, participate in a seminar course and take “Communicating Science” course.

<http://www.biology.ufl.edu/hhmi/about.html>

Entering Mentoring Workshop (2009)

Participated in a six-part workshop “Entering Mentoring”. Explored mentoring goals and expectations, challenges and issues, and developed mentoring philosophy.

Undergraduate Research Supervisor (2005 – 2010)

Helped students design and implement Independent Study research projects and advised them on graduate school application process.

Independent Research Students Mentored and Resulting Studies

- Brady Wynn (Undergraduate, senior, HHMI Program, 2009 – 2010, currently applying to graduate school)
“The effects of light pollution on Northern Mockingbird foraging and feeding behavior.”
- Michelle Feole (Undergraduate, sophomore, HHMI Program, 2009 – 2010)
“How do Northern Mockingbirds adjust their song to overcome urban noise?”
- Kim Marshall (Undergraduate, senior, 2008 – 2009, currently applying to graduate school)
“Does light pollution cause urban mockingbirds to breed earlier than non-urban mockingbirds?”
- Rachel Hanauer (Undergraduate, senior, 2008 – 2009, currently applying to graduate school)
“Why has an urban adapter, the Northern Mockingbird, declined in Florida?”

- Puja Patel (Undergraduate, senior, Undergraduate Scholars Program, 2007 – 2008, currently enrolled in UCLA Dental School)
“Do Northern Mockingbirds change their songs to compensate for urban noise?”
- Randall Anderson (Undergraduate, senior, 2008 – 2009, currently enrolled in Master’s of Education program at Texas Tech)
“Incorporating current scientific research in the high school classroom.”
- Jessica Maciel (Undergraduate, senior, 2007, currently middle school teacher)
“Bridging the gap between classroom teachers and university researchers.”
- Ariane Le Gros (Intern, Master’s student at Paris Agrotech University, 2008 – 2009)
“Fitness consequences of nestling parasitism by the botfly *Philornis porteri* on nestling and adult Northern Mockingbirds” and “Changes in host-parasite interactions with urbanization in the Northern Mockingbird and the botfly *Philornis porteri*”.
- Jane Bauer (Post-bachelor, 2007, currently a dolphin trainer)
“Are urban mockingbirds more aggressive nest defenders than non-urban mockingbirds? A predator presentation experiment.”
- Haley Conde (Volunteer, high school senior, IB program, 2009)
“Changes in host-parasite interactions with urbanization in the Northern Mockingbird and the botfly *Philornis porteri*.”
- Angel Watson (Volunteer, high school junior, 2007 – 2010)
“Which nestling gets the worm? A study of parental decision-making.”
- Tabitha Rivera (Volunteer, high school junior, 2007 – 2010)
“Which nestling gets the worm? A study of parental decision-making.”

Undergraduate Students Supervised

- Kathryn Conner (Lab Assistant, sophomore, 2009)
- Judit Ungvari-Martin (Field Assistant, senior, 2007, currently enrolled in Ph.D. program at University of Florida)
- Laura Levin (Field Assistant, senior, 2007, currently manager at Wild Birds Unlimited)
- Jillian McKee (Field Assistant, senior, 2007, applying to graduate schools)
- Amelia Savage (Field Assistant, senior, 2006, currently enrolled in a Master’s program at North Carolina State University)
- Rebecca Sandidge (Field Assistant, senior, 2006, currently an NSF Predoctoral Fellow at UC Berkeley)

RESEARCH EXPERIENCE

Field Assistant, Dr. Scott Robinson, University of Illinois (2002)

Searched for and monitored songbird nests in Shawnee National Forest and censused avian community.

Data Analyst, Dr. Julie Lockwood, University of California, Davis (2001)

Assessed the impact of fire on the endangered Cape Sable Seaside Sparrow using satellite imagery. Results of study were presented at a meeting held by the National Park Service, resulting in a 5-year Cape Sable Seaside Sparrow fire implementation plan.

Field Assistant, Dr. Stuart Pimm, Everglades National Park (2001)

Obtained GPS coordinates for territories and nesting sites of the Cape Sable Seaside Sparrow and assisted in mist netting.

Research Intern, Bronx Zoo, Department of Ornithology (2000)

Conducted behavioral research and performed keeper duties with birds.

Undergraduate Independent Study, The College of New Jersey (1999 – 2000)

Temporal survey of butterfly species in the Pine Barrens of New Jersey. Results published in Walz, Kathleen Strakosch, Scott Stanford, Emily W.F. Russell. 2002. Identification and Protection of Reference Wetland Natural Communities in New Jersey: Pine Barren Savannas. Trenton, NJ. (*Report for New Jersey Department of Environmental Protection, Division of Parks and Forestry, Office of Natural Lands Management, Natural Heritage Program*).

Lab Assistant, Dr. Janice Bossart, Biology Department, The College of New Jersey (1999)

Assisted in Dr. Bossart's lab with mark and release studies, mating and raising of tiger swallowtails (*Papilio glaucus*), and pinning and identifying African butterflies.

PUBLICATIONS

Stracey, C.M. and S.K. Robinson. Food limitation in nesting urban mockingbirds: resource matching or mismatching? *Biological Conservation (In review)*.

Hanauer*, R., **C.M. Stracey** and S.K. Robinson. Why has an urban adapter, the Northern Mockingbird, declined in Florida? *Florida Field Naturalist (In review)*.

Le Gros, A., **C.M. Stracey** and S.K. Robinson. Fitness consequences of nestling parasitism by the botfly *Philornis porteri* on nestling and adult Northern Mockingbirds (*Mimus polyglottos*). *Journal of Avian Biology (In review)*.

Stracey, C.M. and S.K. Robinson. Does nest predation shape urban bird communities? *Studies in Avian Biology. (in press)*.

Stracey, C.M. and S.L. Pimm. 2009. A test of the Equilibrium Theory of Island Biogeography: Immigration rates of birds on British islands. *Journal of Biogeography*, 36: 1532-1539.

§Levey, D.L., G.A. Londoño, J. Ungvari-Martin*, M.R. Hiersoux*, J.E. Jankowski, J.R. Poulsen, **C.M. Stracey**, and S.K. Robinson. 2009. Urban mockingbirds quickly learn to identify individual humans. *Proceedings of the National Academy of Sciences*, 106 (22): 8959-8962.

Stracey, C.M. 2008. Alien Invaders!: A board game about the threats posed by introduced species. *Science Scope*, 31: 53 – 57.

Vliet, K.A., **C.M. Stracey**, and M.R. Cottam. 2006. *A Lab Manual for Integrated Principles of Biology: Part Two – BSC 2011L*. Pearson Custom Publishing, Boston, MA.

In preparation

Stracey, C.M. Cats and fat doves: shifts in the composition and diet of urban nest predator communities. (In preparation for *Ecological Applications*, to be submitted 10/09).

Le Gros, **C.M. Stracey** and S.K. Robinson. Changes in host-parasite interactions with urbanization in the Northern Mockingbird and the botfly *Philornis porteri*. (In preparation for *Wilson Journal of Ornithology*, to be submitted 10/09).

**Denotes undergraduate author*

§Featured in:

New York Times (May 18, 2009) <http://www.nytimes.com/2009/05/19/science/19obbirds.html>

ScienceNOW (May 18, 2009) <http://sciencenow.sciencemag.org.lp.hscl.ufl.edu/cgi/content/full/2009/518/3>

Abstracts

Stracey, C.M., Robinson, S.K. 2009. The role of nest predation in shaping urban bird communities: a case study with the Northern Mockingbird. *International Urban Wildlife Ecology & Management Symposium: Abstracts with Programs*

Stracey, C.M., Robinson, S.K. 2009. Food limitation in urban mockingbirds: resource matching or mismatching? 6th Annual Southeastern Ecology and Evolution Conference: Abstracts with Programs.

Stracey, C.M., Maciel*, J., Anderson*, R. 2008. Bridging the gap between university researchers and classroom teachers". 93rd Ecological Society of America's Annual Meeting: PS78-64.

Stracey, C.M., Robinson, S.K. 2006. What makes the Northern Mockingbird an urban winner? 4th North American Ornithological Conference: SS18-355.

Stracey, C.M., Robinson, S.K. 2006. Do urban areas act as a refuge from nest predation for an urban “winner”, the Northern Mockingbird (*Mimus polyglottos*)? American Museum of Natural History’s Spring Symposium: Abstracts with Programs.

PRESENTATIONS

- Florida Ornithological Society, Gainesville, FL (2009) – Invited Presentation
- International Urban Wildlife Ecology & Management Symposium, Amherst, MA (2009) – Primary Author Oral Presentation
- Florida Fish and Wildlife Conservation Commission, Gainesville, FL (2009) – Invited Presentation
- Southeastern Ecology and Evolution Conference, Gainesville, FL (2009) – Primary Author Oral Presentation
- Ecological Society of America, Milwaukee, WI (2008) – Primary Author Poster Presentation
- North American Ornithological Conference, Veracruz, Mexico (2006) – Primary Author Oral Presentation
- American Museum of Natural History Spring Symposium, New York, NY (2006) – Primary Author Poster Presentation
- Florida Ornithological Society Scientific Meeting, Mount Dora, FL (2005) – Primary Author Oral Presentation
- The College of New Jersey Undergraduate Research Symposium, Ewing, NJ (2000) – Primary Author Poster Presentation

GRANTS, AWARDS, & FELLOWSHIPS

Graduate Grants, Awards & Fellowships

UF-HHMI G.A.T.O.R. Research Grant \$500 (2009)

“Do differences between urban and non-urban predators explain the nest predator paradox?”

Animal Behavior Society Student Research Grant \$925 (2008)

“How do Northern Mockingbirds (*Mimus polyglottos*) vocally respond to urban noise?”

American Ornithologist’s Union Research Award \$1,800 (2007)

“Is the composition of urban bird communities the result of changes in food resources and predation pressure?”

Graduate Student Teaching Award, Graduate School, University of Florida \$500 (2007)
Most prestigious teaching award for graduate students at the University of Florida.

NSF Doctoral Dissertation Improvement Grant \$11,989 (2006)

“Do changes in food and predation make the Northern Mockingbird (*Mimus polyglottos*) a winner in urban environments?”

Graduate Student Teacher of the Year, Department of Zoology, University of Florida. \$300 (2006)

Student nominated teaching award.

Florida Ornithological Society Research Award \$1500 (2005)

“What makes the Northern Mockingbird an urban winner?”

National Science Foundation Science Partners in Inquiry-based Collaborative Education (S.P.I.C.E.) Fellowship, University of Florida (2004 – 2005)

Graduate Fellowship, University of Illinois (2002 – 2003)

College of Liberal Arts and Sciences Travel Award \$250 (2009)

Registration Scholarship, International Urban Wildlife Ecology & Management Symposium \$175 (2009)

Graduate Student Council Travel Award \$350 (2006, 2008)

Zoology Department Travel Award \$250 (2006, 2008, 2009)

Undergraduate Awards

- Pete Apostolires Post-Graduate Scholarship for Student Athlete \$3000 (2000)
- Tri-Beta National Biological Honor Society (1998 – 2000)
- College Wide Honors Program, The College of New Jersey (1996 – 2000)
- Edward J. Bloustein Scholar (1996 – 2000)
- The College of New Jersey Academic Scholarship (1996 – 2000)

SERVICE

- Reviewer for the Florida Field Naturalist (2006 – present)
- Reviewer for new non-majors book chapter (2008 – 2009)
- Served as “experienced TA” at the Biological Sciences TA’s workshop (August 2008)
- Delivered annual presentations on research to middle school students at Einstein Montessori School (2003 – present)
- Science fair judge at Einstein Montessori School (2003 – present)
- Science fair judge at Westwood Middle School (2005)
- Delivered research presentation at Florida Museum of Natural History summer camp (Summer 2007)
- Welcoming Committee, Zoology Graduate Student Association, University of Florida (2004 – 2005)
- Graduate Student Symposium Committee, University of Illinois (2002 – 2003)
- Keynote Speaker for 8th Grade Graduation at St. James School, Springfield, NJ (Jun 14, 2000)

PROFESSIONAL AFFILIATIONS

- The Wildlife Society – Urban Ecology Working Group
- Ecological Society of America – Urban Ecosystem Ecology Section, Education Section, Student Section
- Animal Behavior Society
- American Ornithologists' Union
- Association of Field Ornithologists
- Wilson Ornithological Society

COURSES

H.H.M.I. Mentoring Program Seminar, Speciation, Life Science Instruction at the University Level, Ecological Statistics, Advanced Ecology Seminar, Interface Ecology & Evolution, GK-12 Seminar, Ecology of Invasive Species, Teaching Science Methods, Avian Anatomy & Specimen Preparation, Integrative Principles of Biology, Foundations Frontiers Ecology, Evolution of Life History Traits, Principles of GIS, Topics in Ecology & Evolution, Remote Sensing, Statistics, Environmental Ethics, Field Ornithology, Population Ecology, Evolution, Ecology, Conservation Biology of the Hudson Valley Ecosystem, Environmental Sociology, Environmental Policy/Politics/Management, Economics of Sustainable Development, Biology of Small Populations, Graduate Seminar in Conservation Biology, Topics in Conservation Biology, Chemical Aspects of the Environment, Objects of Myth and Magic, Technology in American History, Biology Seminar, Honors Independent Study, Lab Techniques Cell/Molecular Biology, Evolution, Biochemistry, Gender and American Society, Cell and Molecular Biology, Biometry, Bioethics, Genetics, Microbiology, Frames of Thought, Human Anatomy and Physiology, Techniques in Tutoring I-II, Society Ethics & Technology, Ecology and Field Biology, Organic Chemistry I-II, General Physics I-II, Calculus I-II, Paris before the Great War, Culture and Design, General Biology I-II, Rhetoric I-II, Spanish for Beginners I-III, Introduction to Psychology I, From Athens to New York, Biology Freshman Seminar