

CHRISTINA RIEHL

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EDUCATION

- 2011 Ph.D. PRINCETON UNIVERSITY, Princeton, NJ
Department of Ecology and Evolutionary Biology
- 2005 B. A. HARVARD UNIVERSITY, Cambridge, MA
Magna cum laude with highest honors in Biology

PROFESSIONAL APPOINTMENTS

- Junior Fellow Harvard Society of Fellows, Cambridge, MA
(2012 – present)
- Postdoctoral Research Fellow Smithsonian Tropical Research Institute, Panama
(2011 – 2012)
- Lecturer Princeton University, Princeton, NJ
(2011 – 2012)

GRANTS AND FELLOWSHIPS

- 2012 Milton Fund Research Grant – *Harvard University* (\$35,082)
Putnam Expedition Grant – *Harvard University* (\$5,000)
3-Year Postdoctoral Fellowship – *Harvard Society of Fellows* (\$200,000)
- 2011 1-Year Postdoctoral Fellowship – *Smithsonian Conservation Biology Institute*
(\$45,000, declined)
1-Year Postdoctoral Fellowship – *Smithsonian Tropical Research Institute* (\$45,000)
- 2008 Graduate Research Fellowship – *Princeton Latin American Studies* (\$7,500)
Student Research Grant – *American Ornithologists' Union* (\$1,500)
Frank M. Chapman Research Grant – *American Museum of Natural History* (\$1,500)
- 2007 Short-term Fellowship – *Smithsonian Tropical Research Institute* (\$3,000)
Graduate Research Fellowship – *Princeton Latin American Studies* (\$3,000)
- 2006 Graduate Research Fellowship – *National Science Foundation* (\$122,500)
- 2004 Barry M. Goldwater Scholarship – *Goldwater Excellence in Education* (\$7,500)
Harvard College Research Fellowship – *Harvard University* (\$4,000)

HONORS AND AWARDS

- 2013 Young Professional Award – *Cooper Ornithological Society*
- 2011 Excellence in Teaching Award – *Princeton University* (university-wide)
- 2002-2003 Dean’s List (Top 10% of Harvard University Class of 2005) – *Harvard University*

PUBLICATIONS

- Riehl, C.** 2013. Evolutionary routes to non-kin cooperative breeding in birds. *Proceedings of the Royal Society of London, Series B* 280: 20132245.
- A *Proceedings B* “**Most Read**” article of 2013
 - Highlighted **Editor’s Choice** in *Proceedings B*
- Riehl, C.** 2013. The Harris’s Hawk [Book review.] *Journal of Raptor Research* 47: 333-334.
- Riehl, C.** 2012. Parental care and reproductive skew in a communally breeding cuckoo: hard-working males do not sire more young. *Animal Behaviour* 84: 707-714.
- Riehl, C.** 2011. Living with strangers: direct benefits favor non-kin cooperation in a communally breeding bird. *Proceedings of the Royal Society of London, Series B* 278:1728-1735
- **Science Editor’s Choice** (*Science* 330:1289)
 - Rated “Must Read” by **Faculty of 1000** (<http://f1000.com/13357090>)
- Riehl, C.** 2011. Paternal investment and the “sexually selected” hypothesis for the evolution of eggshell coloration: revisiting the assumptions. *The Auk* 128: 175-179.
- Riehl, C.** 2010. A simple rule reduces conspecific brood parasitism in a communally breeding bird. *Current Biology* 20 (20): 1830-1833.
- Rated “Must Read” by **Faculty of 1000** (<http://f1000.com/6381960>)
 - **Highlighted in *Evolutionary Analysis 5th Ed.*** (Freeman & Herron, 2013)
- Riehl, C.** 2010. Egg ejection risk and hatching asynchrony predict egg mass in a communally breeding cuckoo, the Greater Ani. *Behavioral Ecology* 21: 676-683.
- Riehl, C.,** and S. M. Bogdanowicz. 2009. Isolation and characterization of microsatellite markers from the greater ani *Crotophaga major* (Aves: Cuculidae). *Molecular Ecology Resources* [Internet] Available from: <http://tomato.biol.trinity.edu/manuscripts/9-6/mer-09-0270.pdf>.
- Riehl, C.,** and L. Jara. 2009. Natural history and reproductive biology of the communally breeding Greater Ani (*Crotophaga major*) in Gatún Lake, Panama. *The Wilson Journal of Ornithology* 121: 679-687.
- Riehl, C.,** and G. S. Adelson. 2008. Seasonal insectivory by Black-headed Trogons, a tropical dry forest frugivore. *Journal of Field Ornithology* 79: 371-380.
- Riehl, C.** 2008. Communal calling and prospecting by Black-headed Trogons (*Trogon melanocephalus*). *The Wilson Journal of Ornithology* 120:248–255.
- Riehl, C.** 2007. Evidence for cooperative breeding by White-bellied Go-Away Birds (*Corythaixoides leucogaster*). *African Journal of Ecology* 46:421-423.

- Riehl, C.** 2006. Widespread cannibalism by fledglings in a colony of Black-crowned Night-Herons. *The Wilson Bulletin* 118: 101-104.
- Riehl, C.** 2002. Red-shouldered Hawk preys on Pied-billed Grebe. *Journal of Field Ornithology* 73: 410-411.
- Riehl, C.** 2001. Black-crowned Night-Heron fishes with bait. *Waterbirds* 24: 285-286.

IN THE PIPELINE...

- Riehl, C.** 2013. *In press.* Cuckoos of the World [Book review]. *The Wilson Journal of Ornithology*.
- Coulson, J. O., and **C. Riehl.** 2013. *In review.* Wing and tail morphology of subadult northern Swallow-tailed Kites. Submitted to *Journal of Raptor Research*.
- Riehl, C.,** M. Strong, and S. V. Edwards. 2013. *In review.* Inferential reasoning and egg ejection in a non-parasitic cuckoo. Submitted to *Animal Cognition*.
- Riehl, C.,** M. Strong, and S. V. Edwards. 2013. *In prep.* Evolutionary stability of a brood-parasitic strategy in a population of obligate cooperators. Intended for submission to *Nature*.
- Portugal, S. and **C. Riehl.** 2013. *In prep.* Egg physiology and development time: vaterite coating on birds' eggshells promotes rapid water loss during incubation. Intended for submission to *Journal of Experimental Biology*.

TEACHING EXPERIENCE

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| 2014 | Lecturer, <i>Evolutionary Ecology of Tropical Birds</i> , NSF Integrative Graduate Education and Research Traineeship (IGERT) Program (Field and Lecture) |
| 2012 | Lecturer, <i>Tropical Vertebrate Ecology</i> , Dept. of Ecology and Evolutionary Biology, Princeton University (Co-taught with several faculty) |
| 2011 | Lecturer, <i>Introduction to Population and Community Ecology</i> , Dept. of Ecology and Evolutionary Biology, Princeton University.
Lecturer, <i>Junior Tutorial</i> , Dept. of Ecology and Evolutionary Biology, Princeton University.
Laboratory Instructor, <i>Comparative Anatomy and Physiology</i> , Dept. of Ecology and Evolutionary Biology, Princeton University. |
| 2010 | Teaching Assistant, <i>Evolutionary Biology</i> , Dept. of Ecology and Evolutionary Biology, Princeton University.
Lecturer, Spring Field Course: <i>Introduction to Environmental Studies</i> , Lake Forest College, Chicago. (Co-taught with Glenn Adelson) |
| 2007-08 | Writing Instructor, <i>The Writing Program</i> , Princeton University. |
| 2006 | Teaching Assistant, <i>Behavioral Ecology</i> , Dept. of Ecology and Evolutionary Biology, Princeton University. |
| 2005 | Laboratory Instructor, <i>The Biology of Organisms</i> , Dept. of Ecology and Evolutionary Biology, Princeton University. |
| 2004 | Teaching Assistant, <i>Biodiversity of Agriculture</i> , Dept. of Biology, Harvard University. |

STUDENTS AND INTERNS

- 2013 Meghan Strong (Master's student, University of California Northridge)
Conducted field experiments to determine whether cooperatively breeding female anis track their own eggs in a shared nest
- 2013 Richard Simpson (Ph.D. student, Arizona State University)
Won STRI Short-Term Fellowship to study visual perception in Red-throated Ant-Tanagers; co-advised by C. Riehl and STRI Staff Scientist John Christy
- 2010 Laura Jara Reyes (Undergraduate student, Universidad de los Andes and STRI Internship Program)
Conducted research in my lab on distribution of fruiting trees on Barro Colorado Island, Panama, for undergraduate honors thesis

CONFERENCE PRESENTATIONS

- Riehl, C.** 2013. Sneaky reproductive strategies in a “cooperative” bird. American Ornithologists' Union and Cooper Ornithological Society, Chicago, IL. (Young Professional Award)
- Riehl, C. and S. V. Edwards.** 2013. Cheaters and collaborators: the evolution of conspecific brood parasitism in a cooperatively breeding bird. Wilson Ornithological Society, Williamsburg, VA.
- Riehl, C.** 2012. Paternal care and reproductive skew in a communally breeding cuckoo. Animal Behaviour Society, Albuquerque, NM.
- Riehl, C. and L. Jara.** 2010. Greater Anis can discriminate between predatory Yellow-headed Caracaras and similar, non-predatory Snail Kites. Association for the Study of Animal Behaviour, London, England.
- Riehl, C.** 2010. Cooperation and parasitism in a communally breeding bird, the Greater Ani. Animal Behaviour Society, Williamsburg, VA.
- Riehl, C.** 2010. Alternative reproductive strategies: joint nesting and social monogamy. American Ornithologists' Union and Cooper Ornithological Society. San Diego, CA.
- Riehl, C., and M. C. Wikelski.** 2009. Unusual variation in egg size in the Greater Ani, a communally breeding cuckoo with extreme reproductive competition. Wilson Ornithological Society and the Association of Field Ornithologists. Pittsburgh, PA.

INVITED LECTURES

- 2013 University of Pennsylvania, PA: Behavioral Ecology Seminar
Boston University, MA: Animal Behavior Seminar
University of New Hampshire, NH: Behavioral Ecology Seminar
- 2012 Smithsonian Tropical Research Institute, Panama: Tupper Seminar
Tulane University, LA: Department of Ecology and Evolutionary Biology Seminar
- 2010 Harvard University, MA: Program in Evolutionary Dynamics Seminar
Lake Forest College, IL: Biology Department Seminar
City University of New York, NY: Animal Behavior and Conservation Seminar
- 2009 Smithsonian Tropical Research Institute, Bambi Seminar
Organization for Tropical Studies, Panama: Graduate Field Course
Cornell Laboratory of Ornithology, NY: Ornithology Seminar

PEER REVIEWER:

Journals: *The American Naturalist*; *Current Biology*; *Proceedings of the Royal Society of London, Series B*; *Animal Behaviour*; *Behavioral Ecology*; *Animal Cognition*; *Naturwissenschaften*; *Journal of Experimental Biology*; *Behavioral Ecology and Sociobiology*; *Journal of Zoology*; *Journal of Avian Biology*; *The Ibis*; *The Auk*; *The Condor*; *The Wilson Journal of Ornithology*; *Waterbirds*; *The Journal of Field Ornithology*; *The Journal of Louisiana Ornithology*

Grants: National Science Foundation, Israel Science Foundation, Smithsonian Tropical Research Institute, Animal Behavior Society

Books: Yale University Press, Harvard University Press, Louisiana State University Press

POPULAR & SCIENTIFIC PRESS COVERAGE:

August, 2013: *Evolutionary Analysis*, Freeman & Herron, 5th Ed (Textbook).

May, 2013: *Proceedings of the National Academy of Sciences*. Inner Workings: Studying an elusive cuckoo.

<http://www.pnas.org/content/110/22/8755.full>

January, 2013: *Harvard Magazine*. Survival of the cooperative.

<http://harvardmagazine.com/2013/01/survival-of-the-cooperative>

April, 2012: *Smithsonian Tropical Research Institute*. Meet our scientists (Webcast).

December, 2010: *Science*. Editor's Choice: Good for you, good for me too.

<http://www.sciencemag.org/content/330/6009/1289.3.full?sid=e7a4feb8-c03a-4b92-957f-b577587257a0>

November, 2010: *Current Biology*. Dispatch: Clever defense against cheats.

[http://www.cell.com/current-biology/abstract/S0960-9822\(10\)01213-3](http://www.cell.com/current-biology/abstract/S0960-9822(10)01213-3)