

Ryan S. Terrill, Ph. D.

Postdoctoral Researcher
Moore Lab of Zoology
Occidental College

Curriculum vitae

Education:

University of California Santa Cruz: Bachelor of Science: Ecology and Evolutionary Biology Mar 2009
Louisiana State University: PhD August 2017

Academic Appointments:

2020-2022: Postdoctoral Researcher, Moore Lab of Zoology, Occidental College
2019: Part-time Assistant Professor, Occidental College Biology Department.
2017-2019: Postdoctoral Fellow, National Science Foundation and Occidental College
2016-2017: Teaching/Curatorial assistant, Louisiana State University Department of Biological Sciences
2015-2016: Teaching assistant, Louisiana State University Department of Biological Sciences
2014-2015: Curatorial Assistant, Louisiana State University
2013-2014: Teaching assistant/Curatorial Assistant, Louisiana State University
2012-2013: Teaching assistant, Louisiana State University Department of Biological Sciences
2010-2012: Curatorial Assistant, Louisiana State University Museum of Natural Science
2009-2010: Visiting Student Award, Smithsonian National Zoological Park Migratory Bird Center

Non-Academic Appointments:

2020-2023: Vice Chair, California Bird Records Committee
2019- : *Featured photo* Associate Editor: *Western Birds*
2012: Early Career Editorial Board. Cooper Ornithological Society
2006-2010: Subregional Editor: *North American Birds*

Languages:

English – native
Spanish (South American and Central American) – fluent
Brazilian (Portuguese) -- beginner

Books:

Sebastian K. Herzog, **Ryan S. Terrill**, Alex E. Jahn, J.V. Remsen, Jr., Oswaldo Maillard Z., Víctor H. García-Solíz, Ross MacLeod, Aidan McCormick, and Julián Q. Vidoz. 2016. *Birds of Bolivia: Field Guide*. Asociación Armonía, Santa Cruz de La Sierra, Bolivia.

Peer-Reviewed Publications

19. **Ryan S. Terrill**, Youyi Fong, Jared D. Wolfe, and Amanda J. Zellmer. Threshold models improve estimates of molt parameters in datasets with small sample sizes. *Ornithology* ukab038.
18. Ana Maria Gutiérrez-Zuluaga, Catalina González-Quevado, Jessica A. Oswald, **Ryan S. Terrill**, Jorge L. Perez-Emen, Juan Luis Parra. Genetic data and niche differences suggest that disjunct populations of *Diglossa brunneiventris* are not sister lineages. *Ornithology*. ukab015.

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17. Jessica A. Oswald, **Ryan S. Terrill**, Stucky BJ, LeFebvre MJ, Steadman DW, Guralnick RP, Allen JM. Ancient DNA from the extinct flightless Haitian cave-rail (*Nesotrochis steganinos*) suggests biogeographic connection of the Caribbean and Old World. In Review. *Biology Letters* (RSBL-2020-0760).
16. Thomas A. Benson, Deborah J. House, Guy McCaskie, Alex M. Rinkert, Adam J. Searcy and Ryan S. Terrill. The 45th annual report of the California Bird Records Committee: 2019 Records. *Western Birds* 52:-01, pp2-22.
15. Jared D. Wolfe, **Terrill, Ryan S.**, Johnson, Erik I., Powell, Luke L., and Ryder, Brandt T. 2021. Ecological and evolutionary significance of molt in lowland Neotropical landbirds. *Ornithology* ;, ukaa073, <https://doi.org/10.1093/ornithology/ukaa073>
14. **Ryan S. Terrill**. 2020. Simultaneous Wing Molt as a Catalyst for the Evolution of Flightlessness in Birds. *The American Naturalist* 196 (6)
13. **Ryan S. Terrill**, Seeholzer, Glenn F., and Wolfe, Jared D. 2020. Evolution of breeding plumages in birds: A multiple-step pathway to seasonal dichromatism in New World Warblers (Aves: Parulidae). *Ecology and Evolution* 10 (7) 9223-9239.
12. Sarah Skikne, Abe Borker, **Ryan S. Terrill**, and Erika Zavaleta. 2020. Predictors of past avian translocation outcomes inform feasibility of future efforts under climate change. *Biological Conservation* 247.
11. Darien C. Capunitan, Oscar Johnson, **Ryan S. Terrill**, and Sarah M. Hird. 2020. Evolutionary signal in the gut microbiomes of 73 bird species from Equatorial Guinea. *Molecular Ecology* 29:4, 829-847.
10. Franklin, Janet R., Lucas C, Majure, Yuley Encarnación, Teodoro Clase, Hodali Almonte-Espinosa, Miguel Landestoy, Andrew W. Kratter, Jessica A. Oswald, Douglas E. Soltis, **Ryan S. Terrill** and David W. Steadman. 2019. Changing Ecological Communities along an Elevation Gradient in Seasonally Dry Tropical Forest in Hispaniola (Sierra Martín García, Dominican Republic). *Biotropica*; 00:1-15
9. **Ryan S. Terrill**, James M. Maley, Whitney L.E. Tsai, Jeremy Yoder, Kevin Fistanic, Rowdy Freeland, Anna Franceschelli, Bryce Lewis-Smith, and Leeza Lu. Tricolored Blackbirds feeding in Western Joshua Tree Inflorescences. *Western Birds* 50 180:182.
8. **Ryan S. Terrill**. 2018. Feather growth rate increases with latitude in four species of widespread resident neotropical birds. *The Auk: Ornithological Advances* 135.
7. Jacob C. Cooper, Oscar Johnson, Tristan J. Davis, **Ryan S. Terrill**, Jared D. Wolfe, Kristin E. Brzeski, Amancio Motove Etingüe & Luke L. Powell. 2017. Notes on the distribution of the avifauna of Bioko Island, Equatorial Guinea, including one new country record. *Malimbus* 39: 1-15.
6. Costa, Thiago V.V., Vitor de q. Piacentini, Dalci M. M. Oliveira, Fábio Schunck, Bret m. Whitney, Marco a. Rêgo, Tatiana C. Rubio, Fabiano Oliveira, Benedito Freitas, Glaucia Del-Rio, Glenn F. Seeholzer, Michael G. Harvey, **Ryan s. Terrill**, André g. Correa, Felipe Arantes, and Luis Fábio Silveira. New records of the enigmatic *Clyctantes atrogularis* (Thamnophilidae) in Amazonian Brazil, with remarks on plumage, natural history and distribution. 2016. *The Wilson Journal of Ornithology* 129(1), 1-12.
5. Harvey, Michael G., Glenn F. Seeholzer, Daniel Caceres A., Benjamin M. Winger, Jose G. Tello, Flor Hernandez Camacho, Miguel Angel Aponte Justiniano, Caroline V. Duffie, Sheila Figueroa Ramirez, **Ryan S. Terrill**, Clare E. Brown, Luis Alberto Alza Leon, Gustavo Bravo, Mariela Combe, Omar Custodio, Alessandra Quinonez Zumaeta, Amraham Urbay Tello, Willy Antonio Garcia Bravo, Aaron Z. Savit, Frans Willy Pezo

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Ruiz, William M. Mauck III and Olivier Barden. 2014. The Avian Biogeography of an Amazonian headwater: The upper Ucayali river, Peru. *The Wilson Journal of Ornithology* 126(6):179-191

4. Jared D. Wolfe, Erik I Johnson, and **Ryan S. Terrill**. 2014. Searching for consensus in molt terminology 11 years after Howell et al's "first basic problem". 2014. *The Auk: Ornithological Advances*. 131:371-377
3. **Ryan S. Terrill**, Miguel Angel Aponte Justiniano, Michael G. Harvey, Glenn F. Seeholzer, and Rosa Ines Strem. 2014. Notes on the Avifauna of the floodplain forest of the Rio Mamore, Beni, Bolivia. With a description of the Juvenile plumage of Unicolored Thrush (*Turdus haplochrous*) (Aves:turdidae). *The occasional papers of the museum of natural science. Louisiana State University*. 82:1-21
2. Harvey, Michael G., Daniel F. Lane, Justin Hite, **Ryan S. Terrill**, Sheila Figueroa Ramirez, Brian Tilston Smith, John Klicka, and Walter Vargas Campos. 2014. Notes on bird species in bamboo in northern Madre de Dios, Peru, including the first Peruvian record of Acre Tody-Tyrant (*Hemitriccus cohnhafti*). *The occasional papers of the museum of natural science. Louisiana State University*. 81:1-38
1. **Ryan S. Terrill**, James R. Tietz and Matthew L. Brady (2010) A potential hybrid Philadelphia x Red-eyed Vireo on Southeast Farallon Island. *Western Birds* 41: 231-239

Non peer-reviewed Publications:

Stefan Woltmann, **Ryan S. Terrill**, Matthew J. Miller and Matthew L. Brady. 2010. Chestnut-backed Antbird (*Myrmeciza exsul*). *Neotropical Birds Online* (T.S. Schulenberg, Editor). Ithaca: Cornell Lab of Ornithology

Bert T. McKee, and **Ryan S. Terrill**. 2004. Dark Shearwaters in the Northeast Pacific. *Birding*. vol. 36 no. 6.

Preprints

20. **Ryan S. Terrill**, and Allison J. Schultz. On the multifunctionality of feathers and the evolution of birds. EcoEvoRxiv preprint. <https://ecoevorxiv.org/t7p94/>

In Review

Miguel Angel Aponte Justiniano, Reira, DC, Guzman, AGC, Maillard, OZ, **Ryan S. Terrill**, Lane, DF, Ramirez, R., Arispe, R., Acosta, LA, Saltatierra Gomez, MM, Pantoja WS, Avile, EGS, Aliaga-Pantoja, D. New and noteworthy observations on the distributions of birds of Bolivia. In Review. *The Cotinga*

Ryan S. Terrill, Christine A. Dean, John Garrett, Daniel J. Maxwell, Lauren Hill, Andrew Farnsworth, Adriaan Dokter, and Morgan W. Tingley. A novel locality for the observation of thousands of passerine birds during spring migration in Los Angeles Co., CA. In Review. *Western Birds*

Daniel F. Lane, Miguel Angel Aponte Justiniano, **Ryan S. Terrill**, Frank E. Rheindt, Luke B. Klicka, Gary H. Rosenberg, C. Jonathan Schmitt, Rosalyn Price-Waldman, and Kevin J. Burns. A distinctive new genus and species of tanager (Passeriformes, Thraupidae) from the lower Yungas of western Bolivia and southern Peru. In Review. *Ornithology*

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Book Reviews:

Ryan S. Terrill. 2018. Book review. Birding Without Borders: An Obsession, a Quest, and the Biggest Year in the World. *Journal of Field Ornithology*

Fellowships:

National Science Foundation Postdoctoral Fellowship in Biology: 2017-2019 1711245. \$140,000

Other Grants:

MRI: Launching an undergraduate-driven Genomics Center through acquisition of an Illumina MiSeq. National Science Foundation. Division of Biological Infrastructure. Major Research Instrumentation award # 1828738. PI/co-PI(s): Joseph Schulz, Shana Goffredi, Daniel Pondella, John McCormack, Amanda Zellmer. Role: contributing researcher. \$226,559

Pasadena Audubon Society: Establishing regular monitoring of spring migration at Bear divide, Los Angeles County, CA: \$3,000

Served as reviewer for Journals:

Current Biology, Molecular Ecology, The Auk: Ornithological Advances, The Condor: Ornithological Applications, The Ibis, Cotinga, Global Change Biology, Wilson Journal of Ornithology, Western Birds, Journal of Field Ornithology, The Wildlife Society Bulletin

Courses Taught:

Occidental College: Avian Biology. Spring 2019.

Classes/sections taught/served as TA:

Louisiana State University: Ornithology, Methods in Ecology, Vertebrate Physiology.

Presentations at professional meetings:

Terrill, Ryan S. *Evolution of molt strategies in birds.* Presented to the Ninth Neotropical Ornithological Congress. Cuzco, Peru. Nov 2011

Terrill, Ryan S. *A phylogenetic and ecogeographic exploration of molt variation in birds.* Presented to the fifth North American Ornithological Congress. Vancouver, Canada. August 2012

Terrill, Ryan S. *Feather growth and the biogeography of stress in Neotropical birds (poster).* Presented to the sixth conference of the International Biogeography Society, Miami, USA. January 2013

Terrill, Ryan S. *Variation in rates of feather growth throughout the ranges of Neotropical Birds.* Presented to the 130th stated meeting of the American Ornithologists Union, Chicago, IL. Aug 2013

Terrill, Ryan S. *Neotenus molt facilitates evolution of flightlessness in birds.* Presented to the joint meeting for the Society for the Study of Evolution and the Society of Systematic Biologists, Raleigh, North Carolina. Aug 2014

Terrill, Ryan S. *Neotenus molt facilitates evolution of flightlessness in birds.* Presented 131st stated meeting of the American Ornithologists Union, Estes Park, CO. Sept 2014

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- Terrill, Ryan S.** *Neotenus molt facilitates evolution of flightlessness in birds*. Presented to the the joint annual meeting of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists. Guarujá, Brazil. June 2015
- Terrill, Ryan S.,** Jared D Wolfe, and Glenn F. Seeholzer. *The evolution of alternative feather replacement strategies in the New World Warblers (Aves: Parulidae)*. Presented to the the joint annual meeting of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists. Austin, TX. 2016
- Terrill, Ryan S.,** Jared D Wolfe, and Glenn F. Seeholzer. *The evolution of alternative feather replacement strategies in the New World Warblers (Aves: Parulidae)*. Presented to the sixth North American
- Terrill, Ryan S.,** James M. Maley, Whitney L.E. Tsai Nakashima, Jared D. Wolfe, Glenn F Seeholzer, and John E. McCormack. *The effects of life history and external drivers on the molts of migratory birds*. Presented to the 136th meeting of the American Ornithological Society. Tucson, AZ 2018.
- Terrill, Ryan S.,** Whitney L.E. Tsai Nakashima, James M. Maley, Sievert Rohwer, Graham Pimm, and John E. McCormack. *Molt-migration in the Mexican Monsoon: 90 years of specimen data reveal a phenological mismatch caused by anthropogenic climate change*. Presented to the 137th meeting of the American Ornithological Society. Anchorage, AK. 2019.

Synergistic activities:

- Member: American Ornithologists Union, the Cooper Ornithological Society, the Wilson Ornithological Society, Western Field Ornithologists, Neotropical Bird Club and the International Biogeography Society.
- Public presentations: Monterey Peninsula Audubon Society, *Asociación Ornitológica de la Plata*; “kidswhobird” Ventana Wildlife Society underprivileged school outreach.
- Volunteer editor: eBird project
- Volunteer tour leader: Shearwater Journeys, the Central Valley Birding Symposium, the Yellow Rails and Rice Festival
- Have trained eight students in Bolivia in bird taxidermy and field techniques, and have involved many Bolivian students in my fieldwork.
- Contributions to other collections: Birds specimens and genetic samples at Museo de historia Natural Noel Kempff Mercado, Universidade de Sao Paulo, and Centro de Ornitología y Biodiversidad (Corbidi) in Lima, Peru. Sound recordings archived at Cornell University’s Macaulay Library.
- Involved undergraduates Laura Mullen and David Holtz in research

Other applicable experience:

- Smithsonian Migratory Bird Center, Washington DC. *Field Technician*
- Cornell Lab of Ornithology, Ithica, NY. *ebird editor*
- North American Birds. *Sub-regional Editor for Marin county, CA*
- Shearwater Journeys, Monterey, CA. *Tour Leader*
- PRBO Conservation Science, Petaluma, CA. *Migration ecology field technician*
- Crescent Coastal Research, Crescent City, CA. *Seabird Survey field technician*
- Tulane University/La Selva Biological Station, Heredia, Costa Rica. *Research assistant*
- Jocotoco Foundation, Quito, Ecuador. *Field technician*
- UCSC Museum of Natural History, Santa Cruz, CA *Specimen preparator*
- Big Sur Ornithology Lab. Big Sur, CA *Conservation Ecology field technician*
- Cornell Lab of Ornithology, Ithica, NY. *Ivory-billed Woodpecker searcher*