

Ruth Yvonne Oliver

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Lamont-Doherty Earth Observatory
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Education

PhD Candidate Earth & Environmental Sciences, Columbia University

MPhil Earth & Environmental Sciences, Columbia University (5/2017)

MA Earth & Environmental Sciences, Columbia University (5/2015)

BA Physics, Claremont McKenna College (5/2013)

Awards and Grants

Outstanding Student Paper Award, American Geophysical Union Fall Meeting, Oral Presentation, 12/2017

Columbia Climate Center Research Grant, Earth Institute, Columbia University, ~\$4000, 11/2017

National Science Foundation Graduate Research Fellowship, 2015-2018

Dean's Fellowship, Columbia University, 2013-2014

Accelerated Integrated Science Sequence, Keck Science Department, 2009

Professional Experience

Research Assistant with Dr. Diane Thompson, Keck Science Dept., Claremont, CA, 2012

Researcher at the Rose Institute for State and Local Government, Claremont, CA, 2009-2012

Paid Intern at the California Air Resources Board, Sacramento, CA, 2009-2011

Professional Activities

Selected Participant AniMove: Animal Movement Analysis for Conservation, Max-Planck Institute for Ornithology, Lake Konstantanz, Germany, 9/2016

Panelist Natural Science and Data Science Interface Workshop, Data Science Institute, Columbia University, 9/2015

Member Lamont-Doherty Colloquium Steering Committee, Palisades, NY, 6/2014-5/2016

Conferences and Presentations

Eavesdropping on the Arctic: Automated bioacoustic reveal dynamics in songbird breeding phenology. Oral Presentation, American Geophysical Union Fall Meeting, New Orleans, 12/2017

An automated bioacoustic approach to understanding inter-annual variability in Arctic-breeding songbirds' response to environmental conditions, Poster Presentation, Data Science Day, Columbia University, 4/2017

Understanding ecological and environmental drivers of American robin (Turdus migratorius) migratory movement and habitat selection, Oral Presentation, US Fish and Wildlife Service Migratory Bird-GIS Joint Venture Webinar, 3/2017

The effect of introduced herbivore eradication on native plant species of Santa Rosa Island, Oral Presentation, California Island Symposium, Ventura, CA, 10/2012

Publications

Ruth Y. Oliver, Daniel P. W. Ellis, Helen E. Chmura, Jesse S. Krasue, Jonathan H. Pérez, Shannan K. Sweet, Laura Gough, John C. Wingfield, Natalie T. Boelman (2018) *Eavesdropping on the Arctic: Automated bioacoustic reveal dynamics in songbird breeding phenology*, *Science Advances*, 4, eaaq1084. DOI: <https://doi.org/10.1126/sciadv.aaq1084>

Ruth Y. Oliver, Wenxin Zhang, Mary E. Blair, Camilo Sanín, Eleanor Sterling, Natalie Boelman (2018) Biotic interactions moderate future decline and northward shift of songbird breeding habitat at high northern latitudes of North America.
In revision.

Benton N. Taylor, Angelica E. Patterson, Moyosore Ajayi, Rachel Arkebauer, Karen Bao, Natalie Bray, Robert M. Elliott, Paul P.G. Gauthier, Jessica Gersony, Rebecca Gibson, Marceau Guerin, Sara Lavenhar, Caroline Leland, Léo Lemordant, Wenying Liao, Jerry Melillo, **Ruth Oliver**, Case M. Prager, William Schuster, Naomi B. Schwartz, Christa Shen, Katherine Pavlis Terlizzi, and Kevin L. Griffin (2017) *Growth and physiology of a dominant understory shrub, Hamamelis virginiana, following canopy disturbance in a temperate hardwood forest*, *Canadian Journal of Forest Research*, 47: 193-201.

Troy S. Magney, Jan U.H. Eitel, Kevin L. Griffin, Natalie T. Boelman, Heather E. Greaves, Case M. Prager, Barry A. Logan, Guang Zheng, Lixia Ma, Elizabeth A. Fortin, **Ruth Y. Oliver**, Lee A. Vierling (2016) *LiDAR canopy radiation model reveals patterns of photosynthetic partitioning in an Arctic shrub*, *Agricultural and Forest Meteorology*, 221: 78-93.
DOI: <http://dx.doi.org/10.1016/j.agrformet.2016.02.007>.

Teaching Experience

Teaching Assistant Introduction to Atmospheric Science, EESC 4008, Fall 2017

Teaching Assistant Earth's Environmental Systems: The Life System, Environmental Biology II, EESC 2300, Spring 2016

Teaching Assistant Earth's Environmental Systems: The Life System, Environmental Biology II, EESC 2300, Spring 2015

Outreach and Media Participation

Presenter Columbia Open Labs Science Café, Columbia University, 12/2017

Paid Participant Transparency Series on Climate Change, Brown Institute for Media Innovation, Columbia University Journalism School, 3/2017 & 12/2017

Participant RELATE: Mentorship Day, GOALS for Girls, Intrepid Sea, Air, & Space Museum, 3/2017 & 3/2018

Experimental Leader Girls' Science Day, Women in Science at Columbia University, 11/2013

Field Blog NASA Earth Observatory, Spring 2016 & 2017

<https://earthobservatory.nasa.gov/blogs/fromthefield/2016/04/18/welcome-to-alberta-canada/>