Nicholas J. Russo

PhD Candidate Ecology and Evolutionary Biology University of California, Los Angeles nickrusso@ucla.edu https://nicholasjrusso.github.io

EDUCATION

University of California, Los Angeles, CA Ph.D., Ecology & Evolutionary Biology, expected 2024 Advisor: Dr. Thomas Smith	Los Angeles, CA 2018-present
University of Connecticut, Storrs, CT Bachelor of Science, Ecology & Evolutionary Biology University Scholar, STEM Scholar, Honors Program	Storrs, CT 2014-2018

PUBLICATIONS

- **Russo, N.J.**, D.L. Nshom, A. Ferraz, N. Barbier, M. Wikelski, E.M. Ordway, S. Saatchi and T.B. Smith. Three-dimensional vegetation structure drives patterns of seed dispersal by African hornbills. *Journal of Animal Ecology*. In Press.
- Dehaudt, B., T. Bruce, V. Deblauwe, A. Ferraz, B. Gardner, T.G. Bibila, M. LeBreton, G. Mempong, K. Njabo, S.N. Nkengbeza, E.M. Ordway, L. Pavan, N.J. Russo, T.B. Smith, and M.S. Luskin. 2024. Seed traits interact with ruminant digestion and forest structure to create divergent seed dispersal outcomes. *Ecology* e4409.
 - Featured by UCLA IoES Magazine, Sep 12, 2024
- **Russo, N.J.,** K.M. Holbrook, T.V. Dietsch, F.A. Forzi, A.S.A. Tekam, and T.B. Smith. A maneuverable canopy net for capturing large tropical birds. 2024. *Journal of Field Ornithology* 95:13.
- **Russo, N.J.**, A.B. Davies, R.V. Blakey, E.M. Ordway, and T.B. Smith. 2023. Feedback loops between 3D vegetation structure and ecological roles of animals. *Ecology Letters* 26: 1597-1613.
- Valenti, V.L., E.C. Carcelen, K. Lange, N.J. Russo, and B. Chapman. 2020. Leveraging Google Earth Engine user interface for semi-automated wetland classification in the Great Lakes Basin at 10 m with optical and radar geospatial datasets. *IEEE Journal of Selected Topics* in Applied Earth Observations and Remote Sensing 13:6008-6018.
- Robertson, M.W.*, N.J. Russo*, S.J. McInnes, B. Goffinet, and J.E. Jiménez. 2020. Potential dispersal of tardigrades by birds through endozoochory: evidence from sub-Antarctic White-bellied Seedsnipe (*Attagis malouinus*). *Polar Biology* 43:899–902. *Shared first authorship
- **Russo, N.J.**, M. Robertson, R. MacKenzie, B. Goffinet, and J.E. Jiménez. 2020. Evidence of targeted consumption of mosses by birds in sub-Antarctic South America. *Austral Ecology* 45:399-403.

- **Russo, N.J.**, C.S. Elphick, N.P. Havill, and M.W. Tingley. 2019. Spring bird migration as a dispersal mechanism for the hemlock woolly adelgid. *Biological Invasions* 5:1585-1599.
 - Featured by Audubon, Feb 20, 2019
- **Russo, N.J.**, C.A.S.-J. Cheah, and M.W. Tingley. 2016. Experimental evidence for branch-tobird transfer as a mechanism for avian dispersal of the hemlock woolly adelgid (Hemiptera: Adelgidae). *Environmental Entomology* 45:1107-1114.
 - Featured by *Entomology Today*, Aug 1, 2016

INVITED SEMINARS AND SYMPOSIA

- Ecological Society of America Meeting, Long Beach, CA, USA. 2024. *It takes a hornbill to build a village: Seed dispersal in a changing Afrotropical landscape*. Oral presentation using NASA Hyperwall.
- NASA Biological Diversity and Ecological Conservation Meeting, Silver Spring, MD, USA. 2024. Understanding seed dispersers' movements and their consequences across rainforest gradients of structural and phenological diversity. Oral presentation.
- Internet of Animals Symposium, Yale University, New Haven, CT, USA. 2022. *Movements of Congo Basin seed dispersers in relation to vegetation structure, phenology, and forest degradation.* Poster presentation.
- All-Biology Undergraduate Symposium, University of Connecticut, Storrs, CT, USA. 2018. Spring bird migration as a dispersal mechanism for a forest insect invasion. Oral presentation.
- Yale-Myers Forest Summer Seminar Series: Eastford, CT, USA. 2017. Spring bird migration as a dispersal mechanism for an invasive insect pest. Oral presentation.
- Northeast Natural History Conference, Cromwell, CT, USA. 2017. Spring bird migration as a dispersal mechanism for an invasive insect pest. Oral presentation.
- Holster Scholar Project Summer Research Presentations, University of Connecticut, Storrs, CT, USA. 2015. *Avian dispersal of the hemlock woolly adelgid*. Oral presentation.

CONTRIBUTED PRESENTATIONS

- Ecological Society of America Meeting, Long Beach, CA, USA. 2024. *Effects of 3D canopy structure on seed dispersal by hornbills in Cameroon*. Poster presentation.
- Wilson Ornithological Society Meeting, Peoria, IL, USA. 2024. *Three-dimensional vegetation* structure drives patterns of seed dispersal by African hornbills. Oral presentation.
- AniMove Summer School, Vancouver, BC, CA. 2023. *Movement ecology of hornbills in Cameroon*. Oral presentation.
- American Geophysical Union Meeting, Chicago, IL, USA. 2022. *Effects of 3D canopy structure on seed dispersal by hornbills in Cameroon*. Oral presentation.
- Wilson Ornithological Society Meeting, Remote. 2021. *Movement ecology of hornbills and spatial patterns of seed dispersal in Cameroon*. Oral presentation.
- Wilson Ornithological Society Meeting, Cape May, NJ, USA. 2019. Spring bird migration as a dispersal mechanism for a forest insect invasion. Oral presentation.

International Ornithological Congress, Vancouver, BC, CA. 2018. *Consumption of bryophytes by montane, sub-Antarctic birds*. Oral presentation and e-Poster.

- American Ornithological Society Meeting, Tucson, AZ, USA. 2018. Spring bird migration as a dispersal mechanism for a forest insect invasion. Oral presentation.
- Connecticut Entomological Society Meeting, Storrs, CT, USA. 2017. Avian spring migration as a dispersal mechanism for the hemlock woolly adelgid. Oral presentation.
- Wilson Ornithological Society Meeting, Ft. Myers, FL, USA. 2017. Avian spring migration as a dispersal mechanism for an invasive insect pest. Oral presentation.
- Fall Frontiers Undergraduate Research Exhibition, University of Connecticut, Storrs, CT, USA. 2016. *Temporal differences in avian dispersal of Adelgidae crawlers*. Poster.
- Fall Frontiers Undergraduate Research Exhibition, University of Connecticut, Storrs, CT, USA. 2015. *Avian dispersal of the hemlock woolly adelgid*. Poster.

TEACHING EXPERIENCE

EEB 169: Biology of the Bats *Teaching Assistant*

EEB 151A: Tropical Ecology *Teaching Assistant*

"Using Google Earth Engine to Monitor Effects of Climate Change in Cameroon" *Invited Workshop Leader*

EEB 100L: Introduction to Ecology and Behavior *Teaching Assistant*

Bird Identification Workshop, Yale-Myers Forest Invited Workshop Leader

Bryophyte Ecology, Tracing Darwin's Path, Sub-Antarctic Biocultural Conservation Program *Guest Lecturer* Winter 2024 Instructor: Dr. Karen Sears

Fall 2023, Fall 2019 Instructor: Dr. Leryn Gorlitsky

> 22-24 June 2021 National Climate Change Observatory of Cameroon

Winter 2020, Winter 2019 Instructors: Dr. Leryn Gorlitsky, Dr. Alison Lipman

Summer 2018

Winter 2018 Instructor: Dr. Roy MacKenzie

PROFESSIONAL EXPERIENCE

Graduate Student Researcher	University of California, Los Angeles, CA, USA	Apr 2024-Present
Partnership for Forests Collaborating GIS Scientist	Remote Work	Feb-Aug 2021
NASA DEVELOP Program Applied Earth Science Intern	Jet Propulsion Laboratory Pasadena, CA, USA	Jan-Apr 2020

Sustainable Ebony Project Collaborating Scientist	Congo Basin Institute Yaoundé, Cameroon	Sept 2018
Bird Genoscape Project Collaborating Scientist	University of California, Los Angeles, CA, USA	Apr-Oct 2018
Great Hollow Ecological Research Center Collaborating Scientist	New Fairfield, CT, USA	May-Jun 2018
Sub-Antarctic Biocultural Conservation Program Student Researcher	Navarino Island, Chile	Dec 2017-Jan 2018

FELLOWSHIPS

2020-23	NSF Graduate Research Fellowship
2020	Fulbright-Hays Doctoral Dissertation Fellowship (Declined for NSF award)
	• Featured by UCLA Newsroom, Aug 27, 2020
2018	Alumni Fellowship, UCLA
2018	Lida Scott Brown Fellowship, UCLA
	Awarded to outstanding applicant in avian biology
DESEARCH EUNDING	

Research Funding

2024-25	David Geffen Sch	nool of Medicine Global Health Seed Grant
	"Forest conservat	ion & human health at the intersection of community based
	participatory rese	arch & ethnography" (\$50,000)
	PI: L. Buchbinde	
	Faculty advisor: I	E. Ordway
	Co-Is, N.J. Russ	5
2023		and Evolutionary Biology Award, UCLA (\$1200)
2023	Lewis and Clark Fund (\$2300)	
2022	Greenville Zoo Conservation Continuing Grant (\$3000)	
2022	Explorers Club Exploration Fund (\$4000)	
2021	-	n-Aid of Research (\$965)
2021	Dept. of Ecology	and Evolutionary Biology Award, UCLA (\$1000)
2021-23	NASA ROSES P	rogram Element A.7: Biodiversity, "Understanding seed disperser
		heir consequences across rainforest gradients of structural and
	phenological dive	ersity" (\$619,840)
	PI and Co-PI:	T.B. Smith, S. Saatchi
	Co-Is:	A. Ferraz, E. Ordway, M. Crofoot
	Collaborators:	N.J. Russo, M. Luskin, M. Wikelski, V. Deblauwe, V.
		Zaunbrecher, M. Lebreton, N. Barbier
2020	IDEA Wild (\$100	00)
2020	Greenville Zoo C	onservation Grant (\$865)
2020	Association for T	ropical Biology Seed Grant (\$1000)
2020	Sigma Xi Grant-i	n-Aid of Research (\$916)
2020	Hesse Award, Am	nerican Ornithological Society (\$2500)
		, ,

- 2020 Animal Behavior Society (\$1000)
- 2019 GoFundMe campaign: "Rainforest Bird Research in Cameroon" (\$1650)
- 2019 Dept. of Ecology and Evolutionary Biology Award, UCLA (\$2500)
- 2019 Lida Scott Brown Research Stipend, UCLA (\$1000)
- 2018 Katie Bu Memorial Fund Botany Award, UConn (\$1480; returned)
- 2017 Office of Undergraduate Research Supply Award, UConn (\$500)
- 2017 Jed Burtt Mentoring Grant, Wilson Ornithological Society (\$1000) Advisor: Dr. Morgan Tingley
- 2017 Great Hollow Ecological Research Center Grant (\$1000)
- 2017 DeMaio Family Summer Undergraduate Research Fund Award, UConn (\$4000)
- 2016 IDEA Grant, UConn (\$4000)
- 2015 Holster Scholar, UConn (\$4000)

CONSERVATION FUNDING

2017 Connecticut Ornithological Society Mini-grant, UConn Birding Club (\$400) Wrote grant proposal and oversaw project to plant native plant species and construct an interpretive panel for the birds of the UConn EcoGarden

TRAVEL FUNDING

2024	Wilson Ornithological Society Travel Award (\$800)
2023	Dept. of Ecology and Evolutionary Biology Conference Travel, UCLA (\$1500)
2022	Dept. of Ecology and Evolutionary Biology Conference Travel, UCLA (\$1500)
2018	American Ornithological Society Travel Award (\$400)
2017	Office of Undergraduate Research Travel Award, UConn (\$500)

AWARDS AND HONORS

2018	Phi Beta Kappa
2018	Margaret F. Ertman Award for Excellence in Biology, UConn
	Highest honors given to one graduating student for achievement in
	undergraduate biological research
2018	Fulbright U.S. Student Program Alternate
2018	NSF Graduate Research Fellowship Honorable Mention
2017	Nancy Klamm Best Undergraduate Student Oral Paper, Wilson Ornith. Soc.
2017	Connecticut Entomological Society Best 5-minute Talk
2017-18	University Scholar, University of Connecticut
	Award given annually to 30 UConn students for exceptional engagement in
	research
2017	Barry Goldwater Scholarship Honorable Mention
2016	Morris K. and Stewart L. Udall Foundation Environmental Scholar
	• Covered by UConn Today May 10, 2016
2016	American Ornithologists' Union Student Membership Award
2014-18	UConn STEM Scholarship for Academic Excellence

PROFESSIONAL SERVICE AND MEMBERSHIPS

2019-present	Reviewer: Agricultural and Forest Entomology, Biological Invasions, Ecology and Evolution, Wilson Journal of Ornithology	
2018-present	Wilson Ornithological Society Councilor: 2021-2024 Student and Early Professional Committee Co-chair: 2020-present Nominations Committee Chair: 2024-present	
2018-present	Bruin Audubon Society and Birding Club, UCLA Vice President: 2018-2020	
2018	Environmental Literacy Task Force, UConn Designed implementation plan for UConn general education requirement in Environmental Literacy	
2016-18	UConn ECOalition member Alliance of environment-focused student organizations, petitioned for general education requirement in Environmental Literacy	
2015-18	UConn Birding Club: Co-founder and president	
Professional m	nemberships: Animal Behavior Society, American Ornithological Society, Sigma Xi, Wilson Ornithological Society, American Geophysical Union	

OUTREACH AND VOLUNTEER ACTIVITIES

2023	Bird handling workshop in Dja Faunal Reserve, Cameroon
2022	Invited guest speaker: Congo Basin Institute Student Association, UCLA
2022	Invited guest speaker: School for Indigenous and Local Knowledge, Cameroon
2022	Science Education and Sensitization in the "Boucle" Region of Cameroon
2021	Invited guest speaker: EEB 151A Tropical Ecology course, UCLA
2020	National Audubon Society Birding Buddies: Mentored university student virtually in bird identification
2019-20	GreenShorts Environmental Film Contest, UCLA: Mentored two high school students in the creation of an environment-focused short film and judged entries
2019	Invited guest speaker: Advanced Business Communication course, Johnson & Wales University, Providence, RI, USA
2019	Public presentation on radio-tracking birds to community members of Bifolone, Cameroon
a	

SOFTWARE AND PROGRAMMING PROFICIENCY

R; QGIS; Google Earth Engine JavaScript API; Adobe Illustrator

LANGUAGES

English (Native); French (Advanced)