

Lucia R. Weinman

Rutgers University
Graduate Program in Ecology & Evolution
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EDUCATION

- 2017 – pres. PhD candidate in Ecology & Evolution, Rutgers University, New Jersey
Advisor: Dr. Rachael Winfree
- 2010 – 2014 BA in Environmental Biology, Columbia University, New York
Advisor: Dr. Dustin Rubenstein

FELLOWSHIPS & AWARDS

- 2022 \$3500 – Dept. Ecol., Evol. And Nat. Res, Rutgers University, Buell Award
2022 \$750 – School of Graduate Studies, Rutgers University, Student Travel Award
2021 \$2000 – American Society of Naturalists, Student Research Award
2021 \$3000 – Garden Club of America, Caroline Thorne Kissel Award
2021 \$1000 – Dept. Ecol., Evol. and Nat. Res., Rutgers University, Small Grants Award
2020 \$500 – Rutgers Ecology Graduate Student Association, Ted Stiles Award
2020 \$1000 – Dept. Ecol., Evol. and Nat. Res, Rutgers University, Small Grants Award
2017 \$59,208 – Rutgers EOAS Institute, Graduate Assistantship
2017 \$75,000 – School of Graduate Studies, Rutgers University, Presidential Fellowship

PUBLICATIONS

- In prep* **LR Weinman**, T Ress, J Gardiner, and R Winfree. Does bees' pollen transport reflect their scopal pollen collection? *Abstract accepted for a special issue of the American Journal of Botany; manuscript due Oct. 31, 2022.*
- 2022 Simpson, DT, **LR Weinman**, M Genung, M Roswell, M MacLeod, and R Winfree. Many bee species, including rare species, are important for function of entire plant-pollinator networks. *Proceedings of the Royal Society B* 289: 20212689. doi.org10.1098/rspb.2021.2689
- 2019 C Smith, **LR Weinman**, J Gibbs, and R Winfree. Specialist foragers in forest bee communities are small, social or emerge early. *Journal of Animal Ecology*. 88(8): 1158-1167.
- 2015 **LR Weinman**, JW Solomon, and DR Rubenstein. A comparison of single nucleotide polymorphism and microsatellite markers for analysis of parentage and kinship in a cooperatively breeding bird. *Molecular Ecology Resources*. 15(3): 502-511.

PRESENTATIONS

- 2022 **LR Weinman**, T Ress, J Gardner, and R Winfree. Does bees' pollen transport reflect their scopal pollen collection? *Contributed talk, Ecology Society of America National Meeting, Montreal, QB, Canada*

- 2021 **LR Weinman.** Pollen use by forest bees: conservation, diet breadth across space, and bee-plant conflict. *Ecology Graduate Student Association Seminar, New Brunswick, NJ*
- 2021 **LR Weinman, J Gardner, and R Winfree.** Forest Bee Communities in Great Lakes National Parks. *Great Lakes Restoration Initiative Pollinator Task Force Virtual Summer Workshop, invited speaker*
- 2020 **LR Weinman and R Winfree.** Forest Bee Pollen Use in Great Lakes National Parks. *Great Lakes Restoration Initiative Pollinator Task Force Virtual Summer Workshop, invited speaker*
- 2020 **LR Weinman.** Turnover of core species in plant-pollinator networks along an anthropogenic gradient. *Ecology Graduate Student Association Seminar, New Brunswick, NJ*
- 2019 DT Simpson, **LR Weinman**, M Genung, M MacLeod, and R Winfree. Higher pollinator diversity is needed to pollinate native plant communities compared to crops. *Contributed talk, Ecology Society of America National Meeting, Louisville, KY*

TEACHING & MENTORSHIP

Primary mentor of independent undergraduate research

2022 – pres. Sophia Rosahl, '23, independent research project, "Effects of bee body size on foraging specialization."

- *Oriented undergraduate researcher to literature on forest bees and pollen foraging*
- *Provided training and supervision of pollen sample processing*
- *Advised on development of research questions, and on data manipulation and visualization in R*

2020 – 2021 Rebecca Unz, '21, George H. Cook Scholar Honors Thesis, "A literature review of the plant associations of forest specialist bees."

- *Oriented undergraduate researcher to literature on forest bees and pollen foraging*
- *Advised on development of research questions, on literature search protocols, and on data manipulation and summary in Excel*
- *Provided feedback on interpretation of results and on final report and presentation*

Supervisor, practical research experience

2018 – 2022 Practical Experience in Ecology, Evolution and Natural Resources [11:216:440]

- *Trained and supervised students on bee specimen and pollen sample curation*
- *Worked with students to develop independent work plans*

- *Students supervised:* Mariel Vandegrift, '23, 2022; Rebecca Unz, '21, 2019-20; Morgan Crooks, '20, 2018-19

Teaching experience

2020 – 2021 Teaching assistant, Principles of Ecology Lab [11:216:332]

- *Provided instruction for two weekly, 3 hour lab sections on concepts in ecology, common field methods, statistics, and data analysis in R and Excel*
- *Developed or adapted materials for 4 virtual labs*

2019 – 2020; 2022 Teaching assistant, Plant Ecology Lab [11:216:352]

- *Provided instruction for two weekly, 4 hour lab sections on concepts in plant ecology, common field methods, statistics, data analysis, and plant identification*
- *Designed and developed materials for 2 in-person and 3 virtual labs*
- *Advised students on semester-long group research project; in small groups, students developed research questions, conducted literature searches, collected data from digitized herbarium specimens, analyzed data, and wrote final reports*

OUTREACH PRESENTATIONS

- 2019 **LR Weinman.** Bee food: Characterizing the pollen diet of spring forest bees. Indiana Dunes National Park, IN
- 2019 M Roswell and **LR Weinman.** Bees and Pollination. Master Ecologist course, Duke Farms, NJ
- 2017 **LR Weinman.** Who are the native bees? Franklin Park Public Library, NJ
- 2017 **LR Weinman** and C Smith. The conservation and ecology of native bees. Rutgers Gardens, NJ
- 2017 **LR Weinman.** Who are the native bees? Environmental Education Center at Lord Stirling Park, NJ

REPORTS & OTHER PUBLICATIONS

- 2017 C Smith, **LR Weinman**, M Genung, T Harrison, M MacLeod, and R Winfree. Restoring habitat for forest bees in the eastern USA. *Report for the Xerces Society for Invertebrate Conservation.*
- 2017 **LR Weinman** and E Lowe. *Reviewed and synthesized literature on bee declines and habitat requirements in support of Xerces Society Bee Better Certification™ criteria and website.*
- 2017 R Winfree, **LR Weinman**, J Criscione, and E Lowe. Rutgers Extension Fact Sheet: Supporting bees in your garden or on your farm. *Rutgers Agricultural Extension*

PROFESSIONAL SERVICE

Rutgers Ecology and Evolution Graduate Student Association

2022 Eminent Ecologist visit and seminar with Dr. Judith Bronstein; host and lead coordinator
2020 – 2022 GREBEs Student Symposium coordinator
2019 – 2020 Student seminar coordinator

Manuscript Reviews

OIKOS; Molecular Ecology Resources; Joint USGS and National Park Service report on patterns of bee biodiversity in the eastern United States

ADDITIONAL SKILLS

Statistical analysis in R: biodiversity measurement, network analysis, permutational null modelling, distance-based redundancy analysis, PERMANOVA, univariate frequentist statistics

Natural history: Plant identification; pollen identification using light microscopy

REFERENCES

Dr. Rachael Winfree
PhD advisor
Professor, Rutgers University
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Dr. Desiree Robertson
Research coordinator, Great Lakes Research and Education Center
National Park Service
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219-242-5584

Dr. Peter Morin
Dissertation committee member
Distinguished Professor, Rutgers University
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