

Dr. Emily J. Rollinson
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PROFESSIONAL APPOINTMENTS

- 2017 – **Assistant Professor of Biology**
Department of Biological Sciences
East Stroudsburg University, East Stroudsburg, PA
- 2016 – 17 **Postdoctoral Research Associate**
Applied Biomathematics (RAMAS), Setauket, NY

EDUCATION

- | | | |
|-----------|-------------------------------|------------------------------|
| 2009 – 16 | Stony Brook University | Ph.D., Ecology and Evolution |
| 2005 – 09 | Skidmore College | B.A., Biology |

TEACHING

East Stroudsburg University, Department of Biological Sciences

- BIOL 115:** Introductory Biology II Lab. Spring 2018.
- BIOL 200:** General Ecology Lab. Fall 2017, Spring 2018, Fall 2019.
- BIOL 220:** Field Botany (with lab). Spring 2018.
- BIOL 423/523:** Plant Ecology (with lab). Fall 2017, Fall 2018.
- BIOL 496:** Seminar II. Spring 2018.
- BIOL 572:** Thesis I (graduate thesis & research). Fall 2017.
- BIOL 577:** Independent Study – Statistics for Biologists. Spring 2018.
- BIOL 586:** Field Experience and Internship. Spring 2018.
- BIOL 583:** Research Design and Data Analysis for Biologists. Fall 2018.

Instructor, Stony Brook University, Undergraduate Biology Program.

- BIO 211:** Statistics and Data Analysis: A Conceptual Approach. Fall 2015.
- BIO 341:** Plant Diversity (with lab). Summer 2015.
- BIO 301/ECO 301/GEO 301:** Sustainability of the Long Island Pine Barrens. Summer 2011.

Teaching Assistant, Stony Brook University, Undergraduate Biology Program.

- BIO 341:** Plant Diversity (with lab). Spring 2013.
- BIO 356/BEE 587:** Applied Ecology and Conservation Biology Lab. Spring 2010.
- BIO 204:** Fundamentals of Scientific Inquiry in the Biological Sciences I. Fall 2009.

STUDENTS

Primary advisor (M.S.)

Weston Strubert (current)

Thesis committees (M.S.)

Jonathan Adamski (current)

Kristine Bentkowski (current)

Justin Clarke (current)

Joseph Schell (current)

Undergraduate research

Cole Davis (ESU, current)

Jessica Burns (ESU, 2017-2018; now pursuing M.S. in Biology at The College of William and Mary)

Maria Zambuto (Stony Brook University, 2016; now pursuing M.A. in Science Teaching at SBU)

Karen Lohman (Stony Brook University, 2013; now pursuing M.S. in Wildlife Science at Oregon State University)

PUBLICATIONS

Refereed publications

Opulente, D.A., **E.J. Rollinson**, C. Bernick-Roehr, A.B. Hulfachor, A. Rokas, C.P. Kurtzman, and C.T. Hittinger. 2018. Factors driving metabolic diversity in the budding yeast subphylum. *BMC Biology* 16:26.

Lowry, E., **E.J. Rollinson**, A.J. Laybourn, T. Scott, M. Aiello-Lammens, S.M. Gray, J. Mickleby, and J. Gurevitch. 2013. Biological invasions: a field synopsis, systematic review and database of the literature. *Ecology and Evolution* 3(1): 182-196.

Ness, J.H., M.A. Morales, E. Kenison, E. Leduc, P. Leipzig-Scott, **E. Rollinson**, B.J. Swimm, and D. Von Allmen. 2013. Reciprocally beneficial interactions between introduced plants and ants are induced by the presence of a third introduced species. *Oikos* 122(5): 695-704.

Ness J.H., **E.J. Rollinson**, and K.D. Whitney. 2011. Phylogenetic distance can predict susceptibility to attack by natural enemies. *Oikos* 120(9): 1327-1334.

Technical publications

Conservation Plans for Similar Species: Strategies, Methods, and Case Studies. Electric Power Research Institute, Palo Alto, CA. Product ID 3002012102. 2017. Prepared by Applied Biomathematics, Inc. Principal Authors: **E.J. Rollinson**, C.M. Foley, and N.A. Friedenber. Project Manager: R. Goldstein.

Voluntary Conservation Tools: Approaches to Cost-Effectively Protect Multiple Candidate Species and to Avoid Listing. Electric Power Research Institute, Palo Alto, CA. 2016. Product ID 3002007270. Prepared by Applied Biomathematics, Inc. Principal Author: **E. Rollinson**. Additional Authors: S. Ferson, N. Friedenber, L. Ginzburg, and K. Shoemaker. EPRI Project Manager: N. Rao.

Defining Critical Habitat under the Endangered Species Act: A Review of Policy, Practices, and Scientific Approaches. Electric Power Research Institute, Palo Alto, CA. 2015. Product ID 3002006247. Prepared by Applied Biomathematics, Inc. Principal Authors: **E. Rollinson**, N.A. Friedenber, S. Ferson, and L.R. Ginzburg. EPRI Project Manager: B. Goldstein.

Datasets

Dataset 325 *contributed to* TRY-DB Plant Trait Database (try-db.org) – 744 georeferenced observations of 3 plant traits; dataset requested by 85 research proposals to TRY-DB since 2017.

SELECTED PRESENTATIONS

(*ESU graduate student; **ESU undergraduate student; presenting author is underlined).

- 4/2018 Strubert, W.* and E.J. Rollinson. Poster. Effects of riparian plant invasions on stream macroinvertebrate communities. 18th Northeast Natural History Conference.
- 4/2018 Burns, J.R.**, E.J. Rollinson, and H.P. Whidden. Poster. Habitat preferences and species distribution models for bats in the Delaware Water Gap National Recreation Area. 18th Northeast Natural History Conference.
- 4/2018 Burns, J.R.**, E.J. Rollinson, and H.P. Whidden. Poster. Habitat preferences and species distribution models for bats in the Delaware Water Gap National Recreation Area. 49th Annual Meeting of the Commonwealth of Pennsylvania University Biologists.
- 3/2018 Burns, J.R.**, E.J. Rollinson, and H.P. Whidden. Oral Presentation. Habitat preferences and species distribution models for bats in the Delaware Water Gap National Recreation Area. 94th Annual Meeting of the Pennsylvania Academy of Science.
- 10/2017 Tsang, S.M. and E. Rollinson. Oral Presentation. Improving geographic range estimates for island endemics. North American Society for Bat Research, 47th Annual Symposium.
- 8/2017 Tsang, S.M. and E. Rollinson. Oral Presentation. Improving geographic range estimates for island endemics. 3rd Southeast Asian Gateway Evolution Meeting.
- 8/2017 Rollinson, E.J. Oral Presentation. Trait diversity and composition of introduced and native components of riparian plant communities. Ecological Society of America Annual Meeting.
- 6/2017 Rollinson, E.J. Oral Presentation. An experimental approach to understanding the role of flooding in riparian plant communities. Botanical Society of America Annual Meeting.
- 4/2017 Rollinson, E.J. Oral Presentation. Partitioning the Effects of Concurrent Consequences of Floods in Riparian Plant Communities. 17th Northeast National History Conference.
- 4/2016 Rollinson, E.J. Oral Presentation. Introduced species have different traits than natives in riparian plant communities. 16th Northeast Natural History Conference.
- 8/2015 Rollinson, E.J. and J. Gurevitch. Poster. Multiple consequences of flood events have differing effects on riparian vegetation. 100th Ecological Society of America Annual Meeting.
- 7/2015 Rollinson, E.J. and J. Gurevitch. Oral Presentation. Functional diversity and the assembly of riparian plant communities. Botanical Society of America Annual Meeting.
- 7/2015 Rollinson, E.J. and J. Gurevitch. Poster. Abiotic factors underlying variation in composition of riparian plant communities. Botanical Society of America Annual Meeting.
- 4/2015 Rollinson, E.J. and J. Gurevitch. Poster. Abiotic factors underlying variation in composition of riparian plant communities. 15th Northeast Natural History Conference.

- 8/2014 Rollinson, E.J. and J. Gurevitch. Oral Presentation. Riparian plant communities differ from upslope communities at regional but not local scales in species richness, and at both scales in species' identities. 99th Ecological Society of America Annual Meeting.
- 10/2013 Rollinson, E. and J. Gurevitch. Poster. Plant diversity and the abundance of non-native species in riparian zones. Joint UCONN and Stony Brook University Meeting on the Environment and Ecology.
- 7/2013 Rollinson, E. and J. Gurevitch. Poster. The diversity of riparian plant communities of small woodland streams in northern New York State. Botanical Society of America Annual Conference.
- 4/2009 Rollinson, E. and J.H. Ness. Poster. Exotic plant species experience less herbivory than natives in a phylogenetically controlled survey. Odum Conference.
- 4/2008 Rollinson, E., S. Tsang and J. Ness. Poster. Plant apparency and vulnerability to herbivory. 10th Northeast Natural History Conference.

Invited lectures

- 5/3/2018 Master Watershed Steward Program, Monroe County Conservation District.
- 3/2017 Swarthmore College, Department of Biology.
- 2/2017 East Stroudsburg University, Department of Biological Sciences.
- 2/2017 SUNY Plattsburgh, Center for Earth and Environmental Sciences.
- 10/2016 Saint Mary's College, Women in Ecology series (Skype).
- 10/2015 Long Island Botanical Society.

GRANTS AND FUNDING

- 2018 **ESU Summer Undergraduate Research Experience Grant** to support student researcher \$2000
- 2018 **ESU Faculty Development and Research Mini Grant** for summer research expenses \$1200
- 2015 **Graduate Student Excellence Award** for proposed research expenses Department of Ecology and Evolution, Stony Brook University, \$700
- 2014 **Departmental Excellence Research Award** for proposed research expenses Department of Ecology and Evolution, Stony Brook University, \$1607
- 2010 **National Science Foundation Graduate Research Fellowship**, \$120,000

AWARDS AND HONORS

- 2015 **Graduate Student Presentation Award**
Ecological Section of the Botanical Society of America
- 2015 **Departmental Service Award**
Department of Ecology and Evolution, Stony Brook University
- 2009 **Dowd-Lester Award** for an outstanding senior biology major
Department of Biology, Skidmore College
- 2009 **Phi Beta Kappa**, elected member, Skidmore College

2007 **Periclean Honor Society**, elected member, Skidmore College

INSTITUTIONAL SERVICE

East Stroudsburg University

- 2018 - **ESU Green Infrastructure Initiative**
- 2018 - **ESU Environmental Club**, Faculty Advisor
- 2017 - **STEM Living Learning Community Steering Committee**
- 2017 - **Service Learning Committee**
- 2017 - **Academic advisor** for
22 students (Fall 2018)
13 students (Fall 2017)
12 students (Spring 2018)

Stony Brook University

- 2014 - 15 **Chair of Prospective Student Hospitality Committee**, Department of Ecology and Evolution Annual Retreat.
- 2012 - 13 **Vice President, Ecology Club**, Department of Ecology and Evolution.
- 2012 **Graduate Student Representative for Preliminary Exam Committee**, Department of Ecology and Evolution.
- 2010 - 16 **Graduate Student Representative for Darwin Day Activities**, Department of Ecology and Evolution.
- 2010 **Mentor**, Writing to Win grant-writing program, Alliance for Graduate Education and the Professoriate.

PROFESSIONAL SERVICE

- 2018 **NSF Graduate Research Fellowship Program Reviewer/Panelist**
Evolutionary Biology & Systematics Panel
- 2017 - **Organizing Committee**, Pennsylvania Botany (pabotany.org)
- 2017 - **Student Research Committee**, Pennsylvania Botany
- 2011 - 2016 **Judge**, Long Island Science and Engineering Fair.

Reviewer

Book chapters: Intuitive Biostatistics (3rd edition, Oxford University Press, 2017).

Journals: Ecology Letters, Journal of Vegetation Science, Scientific Reports.

OUTREACH ACTIVITIES

- 2015 - **Scientist Volunteer**, Letters to a Pre-Scientist (prescientist.org), K-6 students
- 2015 - **Scientist Mentor**, PlantingScience (plantingscience.org), grades 6-12

PROFESSIONAL SOCIETIES - CURRENT MEMBERSHIPS

Ecological Society of America (Sections: Early Career Ecologists; Invasion Ecology; Science

Communication; Mid-Atlantic; Vegetation Ecology; Researchers at Undergraduate Institutions; Natural History); Botanical Society of America (Ecological Section; Teaching Section); Pennsylvania Academy of Science; Society of Herbarium Curators; American Association for the Advancement of Science; National Center for Science Education

SKILLS & SOFTWARE

R statistical software, JMP statistical software, ArcGIS, QGIS/GRASS GIS, RAMAS risk assessment software, ERDAS Imagine remote sensing software.