

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 |

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. Mickley, 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

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

- E. Rollinson**, S. Ferson, N. Friedenbergl, L. Ginzburg, and K. Shoemaker. **2016**. Voluntary Conservation Tools: Approaches to Cost-Effectively Protect Multiple Candidate Species and to Avoid Listing. Electric Power Research Institute, Palo Alto, CA. Product ID 3002007270. Prepared by Applied Biomathematics, Inc. EPRI Project Manager: N. Rao.
- E. Rollinson**, N.A. Friedenbergl, S. Ferson, and L. R. Ginzburg. **2015**. 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. 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 141 research proposals to TRY-DB since 2017.

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)

Benjamin Hawes (current)

Thesis committees (M.S.)

Jonathan Adamski (current)
 Kristine Bentkowski (current)
 Justin Clarke (current)
 Amanda Layden (current)
 Spirit Rutzler (external committee member; Green Mountain College)
 Joseph Schell (graduated 2019)

Undergraduate research

Nijmih Siryani (ESU, current)
 Elizabeth Deecher (ESU, current)
 Cole Davis (ESU, current)
 Jessica Burns (ESU, 2017-2018, co-advised with Dr. Howard Whidden; 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)

SELECTED PRESENTATIONS

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

- 11/2/2018 Davis, C.**, W. Strubert*, and E.J. Rollinson. Poster. Plant diversity and abundance of invasive species in riparian zones. *2018 Pennsylvania Botany Symposium*.
- 11/2/2018 Strubert, W.* and E.J. Rollinson. Poster. Effects of riparian plant invasions on stream macroinvertebrate communities. *2018 Pennsylvania Botany Symposium*. Presentation won first place in graduate student poster competition.
- 4/14/2018 Strubert, W.* and E.J. Rollinson. Poster. Effects of riparian plant invasions on stream macroinvertebrate communities. *18th Northeast Natural History Conference*.
- 4/14/2018 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*.
- 4/07/2018 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*.
- 3/24/2018 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*.
- 10/20/2017 Tsang, S.M. and E. Rollinson. Oral Presentation. Improving geographic range estimates for island endemics. *North American Society for Bat Research, 47th Annual Symposium*.
- 8/29/2017 Tsang, S.M. and E. Rollinson. Oral Presentation. Improving geographic range estimates for island endemics. *3rd Southeast Asian Gateway Evolution Meeting*.
- 8/7/2017 Rollinson, E.J. Oral Presentation. Trait diversity and composition of introduced and native components of riparian plant communities. *Ecological Society of America Annual Meeting*.
- 6/26/2017 Rollinson, E.J. Oral Presentation. An experimental approach to understanding the role of flooding in riparian plant communities. *Botanical Society of America Annual Meeting*.

- 4/24/2017 Rollinson, E.J. Oral Presentation. Partitioning the Effects of Concurrent Consequences of Floods in Riparian Plant Communities. *17th Northeast National History Conference.*
- Apr 2016 Rollinson, E.J. Oral Presentation. Introduced species have different traits than natives in riparian plant communities. *16th Northeast Natural History Conference.*
- Aug 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.*
- Jul 2015 Rollinson, E.J. and J. Gurevitch. Oral Presentation. Functional diversity and the assembly of riparian plant communities. *Botanical Society of America Annual Meeting.*
- Jul 2015 Rollinson, E.J. and J. Gurevitch. Poster. Abiotic factors underlying variation in composition of riparian plant communities. *Botanical Society of America Annual Meeting.*
- Apr 2015 Rollinson, E.J. and J. Gurevitch. Poster. Abiotic factors underlying variation in composition of riparian plant communities. *15th Northeast Natural History Conference.*
- Aug 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.*
- Jul 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.*

Invited lectures

- 5/03/2018 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

INSTITUTIONAL SERVICE

- 2018- **Greenhouse Committee**, Dept. of Biological Sciences, ESU
- 2018 - **ESU Green Infrastructure Initiative, Green Agriculture Working Group leader**
- 2018 - **ESU Environmental Club**, Faculty Co-Advisor
- 2018 - **Commonwealth of Pennsylvania University Biologists**, Assistant Director at ESU
- 2017 - **ESU Campus Arboretum Guide**, Faculty Advisor
- 2017 - **STEM Living Learning Community Steering Committee**
- 2017 - **Service Learning Committee**
- 2017 - **Academic advisor** for
19 students (Fall 2018)
13 students (Fall 2017)
11 students (Spring 2018)

PROFESSIONAL SERVICE

- Jan 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

Reviewer

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

Journals: Ecology Letters, Journal of Vegetation Science, Scientific Reports, Plant Science Bulletin, Plant Ecology

OUTREACH ACTIVITIES

- 2/11/2019 **International Day of Women and Girls in Science** discussion panel at ESU
- 9/27/2018 **Edible Plants Hike**, ESU Biology Club
- 9/23/2018 **Brodhead Watershed Association**, tour of ESU Campus Arboretum
- 9/18/2018 **4th Annual Women in Science Symposium**, ESU representative (Lacawac Sanctuary and Wayne Pike Workforce Alliance)

- 6/30/2018 **Upper Delaware BioBlitz**, Botany Team member
2015 – **Letters to a PreScientist**, scientist mentor (prescientist.org), K-6 students
2015 – **PlantingScience**, scientist mentor (plantingscience.org), grades 6-12

PROFESSIONAL SOCIETIES – CURRENT MEMBERSHIPS

- 2013 – present **Botanical Society of America** (Ecological Section; Teaching Section)
2014 – present **Ecological Society of America** (Sections: Early Career Ecologists; Invasion Ecology; Science Communication; Mid-Atlantic; Vegetation Ecology; Researchers at Undergraduate Institutions; Natural History)
2017 – present **Pennsylvania Academy of Science**
2017 – present **Commonwealth of Pennsylvania University Biologists** (Assistant Director – ESU)
2017 – present **Society of Herbarium Curators**
2018 – present **Brodhead Watershed Association**