

**Dr. Emily J. Rollinson**  
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**PROFESSIONAL APPOINTMENTS**

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- 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**

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

**PUBLICATIONS**

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*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** and N.A. Friedenber. **2018**. Environmentally Effective Siting of Renewables: Large Scale Data and Predictive Models for Birds and Bats. *Program on Technology Innovation*. Electric Power Research Institute, Palo Alto, CA. Product ID 3002014748. Prepared by Applied Biomathematics, Inc.

Project Manager: J. Goodrich-Mahoney.

**E.J. Rollinson**, C.M. Foley, and N.A. Friedenber. **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. Friedenber, 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. Friedenber, 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 277 research proposals to TRY-DB since 2017.

## **TEACHING**

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East Stroudsburg University, Department of Biological Sciences

### *Recurring courses*

**BIOL 115:** Introductory Biology II Lab. Spring semesters, 2018 - present

**BIOL 200:** General Ecology Lab. Fall and Spring semesters, 2017 - present

**BIOL 220:** Field Botany (with lab). Spring semesters, 2018 – present

**BIOL 423/523:** Plant Ecology (with lab). Fall semesters, 2017 – present

**BIOL 495:** Seminar I. Fall 2019.

**BIOL 496:** Seminar II. Spring 2018.

**BIOL 583:** Research Design and Data Analysis for Biologists. Fall semesters, 2018 – present

### *Independent studies, research, and internships*

**BIOL 485:** Independent Study (undergraduate)

- Plant-Insect Interactions (1 student x 1 credit, Spring 2019)
- Plant Ecology Research (1 student x 1 credit, Spring 2019)
- Plant Population Ecology (1 student x 3 credits, Summer 2019)

**BIOL 494:** Research in Biology (individualized instruction)

- 2 students x 3 credits each, Fall 2018
- 3 students x 3 credits each, Summer 2019

**BIOL 572/573:** Thesis I and II (graduate thesis & research)

- Thesis I (1 student), Fall 2017
- Thesis I (1 student) and Thesis II (2 students), Fall 2019

**BIOL 586:** Field Experience and Internship. Spring 2018.

**BIOL 577:** Independent Study (graduate)

- Statistics for Biologists (3 students x 3 credits each, Spring 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**

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*Primary advisor (M.S.)*

Weston Strubert (current)

Benjamin Hawes (current)

*Thesis committees (M.S.)*

Amanda Layden (current)

Spirit Rutzler (external reader, Green Mountain College; M.S. Environmental Studies Spring 2019)

Jonathan Adamski (M.S. Biology Spring 2019)

Kristine Bentkowski (M.S. Biology Spring 2019)

Justin Clarke (M.S. Biology Spring 2019)

Joseph Schell (M.S. Biology Spring 2019)

*Undergraduate research*

Nijmih Siryani (2019, current student)

George Schubert (2019, current student)

Sean Gift (2019, BS Environmental Studies 2019)

Daniel Rinkenberg (2019, BS Environmental Studies 2019)

Elizabeth Deecher (2018-19, BS Environmental Studies 2019)

Cole Davis (2018-19, BS Environmental Studies 2019)

Jessica Burns (2017-18, 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 teacher at Robert M. Finley Middle School)

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

## **SELECTED PRESENTATIONS**

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

4/13/2019 Strubert, W.\* and E.J. Rollinson. Oral Presentation. Effects of riparian plant invasions on stream macroinvertebrate communities. *2019 Northeast Natural History Conference*.

4/12/2019 Deecher, E.\* and E.J. Rollinson. Poster. Effect of aphid density on monarch abundances in

- milkweed populations. *2019 Northeast Natural History Conference*.
- 4/10/2019 Deecher, E.\* and E.J. Rollinson. Poster. Effect of aphid density on monarch abundances in milkweed populations. *ESU 2019 Student Research and Creative Activity Symposium*.
- 4/10/2019 Strubert, W.\* and E.J. Rollinson. Oral Presentation. Effects of riparian plant invasions on stream macroinvertebrate communities. *ESU 2019 Student Research and Creative Activity Symposium, Sigma Xi Forum*.
- 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. *18<sup>th</sup> 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. *18<sup>th</sup> 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. *49<sup>th</sup> 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. *94<sup>th</sup> 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, 47<sup>th</sup> Annual Symposium*.
- 8/29/2017 Tsang, S.M. and E. Rollinson. Oral Presentation. Improving geographic range estimates for island endemics. *3<sup>rd</sup> 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. *17<sup>th</sup> Northeast National History Conference*.
- Apr 2016 Rollinson, E.J. Oral Presentation. Introduced species have different traits than natives in riparian plant communities. *16<sup>th</sup> 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. *15<sup>th</sup> 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. 99<sup>th</sup> *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

- 5/23/2019 Master Watershed Steward Program, Monroe County Conservation District.
- 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

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- 2019 **ESU Summer Undergraduate Research Experience Grant** to support student researcher \$2000 to *Nijmih Siryani*
- 2018 **ESU Summer Undergraduate Research Experience Grant** to support student researcher \$2000 to *Cole Davis*
- 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

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- 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

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- 2018- **Greenhouse Committee**, Dept. of Biological Sciences, ESU
- 2018 - **ESU Green Infrastructure Initiative, Green Agriculture (Botanical Landscaping) 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 2019)
  - 11 students (Spring 2019)
  - 19 students (Fall 2018)
  - 11 students (Spring 2018)
  - 13 students (Fall 2017)

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### PROFESSIONAL SERVICE

- 2019 – **Board of Directors**, Brodhead Watershed Association
- 2017 – **Organizing Committee**, Pennsylvania Botany ([pabotany.org](http://pabotany.org))
- 2017 – **Student Research Committee**, Pennsylvania Botany
- Jan 2018 **NSF Graduate Research Fellowship Program Reviewer/Panelist**  
Evolutionary Biology & Systematics Panel

#### *Reviewer*

**Book chapters:** Intuitive Biostatistics (3<sup>rd</sup> edition, Oxford University Press, 2017).

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

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### OUTREACH ACTIVITIES

- 7/5/2019 **STEM Careers Panel for Sci-Q Project**, Pocono Environmental Education Center
- 7/3/2019 **Plant Ecology Discussion**, Summer STEM Academy at Pine Bush Schools
- 6/7/2019 **Stony Acres BioBlitz**, Botany Team lead
- 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 **4<sup>th</sup> 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](http://prescientist.org)), K-6 students
- 2015 – **PlantingScience**, scientist mentor ([plantingscience.org](http://plantingscience.org)), grades 6-12

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### 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**
- 2019 - present **Sigma Xi**, Full Member