

Corinn E. Rutkoski

Michigan State University – W.K. Kellogg Biological Station
rutkosk3@msu.edu | 248-275-8355

Education

2019 – Present | **PhD Candidate in Integrative Biology and Environmental Science & Policy**

W.K. Kellogg Biological Station

Michigan State University

My dissertation investigates the compositional and functional responses of soil microbial communities in rowcrop farms integrated with strips of perennial prairie.

2017 | **Bachelor of Science in Environmental Science**

Loyola University Chicago

My undergraduate research project focused on the role of nitrogen and phosphorus availability on the growth of native, invasive and hybrid cattail genotypes in Great Lakes coastal wetlands.

Publications

*co-first author

Kemmerling, L. R., **C. E. Rutkoski**, S. E. Evans, J. A. Helms IV, E. Cordova-Ortiz, J. D. Smith, J. A. Vázquez Custodio, C. Vizza, & N. M. Haddad (2022). Prairie strips and crop management practices for biodiversity and ecosystem services. *Frontiers in Ecology and Evolution*.

Dutter, C., **C. E. Rutkoski***, S. E. Evans, & M. McDaniel (In review). Contour prairie strips alter soil microbial communities and functioning both below the prairie strip and in adjacent cropland. *Applied Soil Ecology*.

Presentations

*undergraduate mentee

Rutkoski, CE, SE Evans. Prairie strip establishment leads to rapid, localized shifts in soil bacterial and fungal communities. Ecological Society of America Annual Meeting. Portland, Oregon. August 2023.

Rutkoski, CE, T Martin, SE Evans, C Sprunger. Nematode and microbial community responses to prairie strips across cropland management regimes. Long Term Ecological Research Network All Scientists Annual Meeting. Monterey, California. September 2022.

Rutkoski, CE, SE Evans. Soil microbial communities respond rapidly to prairie strip establishment across cropland management regimes. Ecological Society of America Annual Meeting. Montréal, Canada. August 2022.

Maples, C*, **CE Rutkoski**, SE Evans. Effects of Prairie Strips on Permanganate Oxidizable Carbon. W.K. Kellogg Biological Station Undergraduate Internship and Research Symposium. Hickory Corners, MI. August 2021.

Rutkoski, CE, SE Evans. How do prairie strips influence biological indicators of soil health? Agronomy Society of America - Crop Science Society of America - Soil Science Society of America International Annual Meeting. Virtual. November 2020.

Rutkoski, CE, SE Evans. Microbial degradation of neonicotinoid pesticides in prairie strip soils. Iowa State University Scientific Trials of Rowcrops Integrated with Prairie Strips Annual Meeting. Ames, IA. January 2020.

Rutkoski, CE, SE Evans. How do prairie strips influence soil health? W.K. Kellogg Biological Station Long Term Ecological Research All Scientists Meeting. Hickory Corners, MI. September 2019.

Rutkoski, CE, SE Evans. Switchgrass phenology and nitrogen transformations. W.K. Kellogg Biological Station. Microbially Mediated Perennial Rhizosphere Nitrogen Transformations All Hands Meeting. Hickory Corners, MI. November 2018.

Al-Tameemi, Z*, **Rutkoski CE**, H Vander Stel, SE Evans. Spatial and temporal variation of plant available inorganic nitrogen in marginal land switchgrass soils. W.K. Kellogg Biological Station Undergraduate Internship and Research Symposium. Hickory Corners, MI. August 2018.

Science Communication

- 2023 | American Association for the Advancement of Science - Catalyzing Advocacy and Engineering Workshop
Participated in science policy training, met with Congressional staffers to advocate for research funding
- 2023 | W.K. Kellogg Bird Sanctuary – Social Media Manager
Managed social media accounts to advertise events and share information about local ecology
- 2023 | *Mowing for Monarchs* – Commissioned artist
Illustrations designed for K-12 lesson plan inspired by monarch research
- 2022 | *Prairie Strips and Soil Health* – Co-Organizer and Presenter
Farm Field Day
Edward Lowe Foundation
- 2022 | *Art Drawn From Nature* – Invited artist
Public art exhibition focused on local ecosystems
Glen Vista Gallery – Kalamazoo Nature Center
- 2021 | *Microbes and mutualism* – Guest lecturer
High School Conservation Biology course
Heronwood Field Station – Kalamazoo Nature Center
- 2021 | *Congressional District Visits* – Presenter
Virtual meetings with congressional staff to advocate for soil science funding
Soil Science Society of America
- 2020 | *Nonacademic Careers in Soil Ecology* – Co-Organizer
Virtual career panel for early career researchers
Kellogg Biological Station
- 2020 | *Nature Journaling: Blending Art and Science* – Organizer and Presenter
Public multi-week art and ecology program
Kellogg Bird Sanctuary
- 2019 | *SciArt Exhibition* – Invited artist
Public art exhibition featuring works by and in collaboration with researchers
Wharton Center for Performing Arts - Michigan State University
- 2019 | *Measuring decomposition in K-12 classrooms* - Presenter
K-12 Educator Soil Health Field Day
Kellogg Biological Station

Academic Awards

- 2023 | Long Term Ecological Research Graduate Student Fellowship
Michigan State University – W.K. Kellogg Biological Station
\$3,250
- 2022 | Graduate Student Fellowship
Michigan State University Graduate School
\$3,500
- 2021-2022 | Graduate Student Grant
USDA Sustainable Agriculture Research and Education Program
\$12,234
- 2021-2024 | Graduate Research Fellowship
National Science Foundation
\$138,000
- 2022 | Long Term Ecological Research Graduate Student Fellowship
Michigan State University – W.K. Kellogg Biological Station
\$6,500
- 2021 | Graduate Student Fellowship
Michigan State University Graduate School
\$2,667
- 2021 | Graduate Student Summer Research Fellowship
Michigan State University – Environmental Science and Policy Program
\$4,873
- 2020-2021 | Plant Science Fellowship
Michigan State University – Department of Horticulture
\$29,000

- 2020 | Outreach Fellowship
Michigan State University – W.K. Kellogg Biological Station
\$2,550
- 2020 | Long Term Ecological Research Small Grants Fellowship
Michigan State University – W.K. Kellogg Biological Station
\$3,250
- 2019-2020 | Graduate Recruiting Fellowship
Michigan State University – College of Natural Science
\$35,000
- 2019 | Doctoral Recruiting Fellowship (declined due to alternate funding source)
Michigan State University – Environmental Science and Policy Program
\$19,000
- 2019 | Long Term Ecological Research Graduate Student Fellowship
Michigan State University – W.K. Kellogg Biological Station
\$4,000

Service

- 2023 | Graduate Student Award for Science Communication and Outreach
Michigan State University Outreach and Engagement
- 2020-2021 | Scientists Engaging and Educating Decision-makers (SEED) Ambassador Award
Soil Science Society of America
- 2020 | Emerging Public Policy Leadership Award
American Institute of Biological Sciences Office of Public Policy
- 2020 | Public Education Grant
Wildflower Association of Michigan
Project: South Westnedge Park Oak Savanna Natural Heritage Garden
\$1,000
- 2020 | Nancy Small Memorial Grant
Kalamazoo Chapter of Wild Ones
Project: South Westnedge Park Oak Savanna Natural Heritage Garden
\$400
- 2019-2023 | Seminar Committee
Michigan State University – W.K. Kellogg Biological Station
- 2019-2022 | Graduate Affairs Committee
Michigan State University – W.K. Kellogg Biological Station
- 2019 | Grant Proposal Review
USDA Sustainable Agriculture Research & Education Proposal
“Towards widespread adoption of prairie conservation strips: case studies increase expertise of professional farm managers, landowners and farmers”

Professional Experience

Evans Lab – W.K. Kellogg Biological Station | Research Technician | October 2017- May 2019
Hickory Corners, Michigan

- Collaborated with graduate students and post-doctoral researchers to investigate microbially mediated nitrogen transformations in the *Panicum virgatum* rhizosphere
- Mentored an Undergraduate Research Apprentice to develop an independent project
- Served on the Culture and Inclusion Committee to develop a survey of workplace culture

The Great Basin Institute | Habitat Assessment Technician | May 2017 – October 2017
Ely, Nevada

- Aided district offices of the United States Forest Service in implementing the Habitat Assessment Framework for the Greater Sage Grouse throughout the Humboldt-Toiyabe National Forest

Tuchman Lab – Loyola University Chicago | Research Assistant | August 2016 – May 2017
Chicago, Illinois

- Collaborated with research associates to author a 2017 EPA P3 Grant Proposal, for which we received \$15,000 to fund an on-campus anaerobic digester and associated research projects

Professional Development

- 2023 | Improving Workplace Climate Workshop - ADVANCEGeo Partnership
- 2021 | Inclusive Interviewing and Hiring – Michigan State University College of Agriculture and Natural Resources
- 2020 | Bystander Intervention Workshop – Michigan State University Department of Prevention, Outreach and Education
- 2020 | Communications Bootcamp for Scientists – American Institute of Biological Sciences
- 2020 | Undergraduate Research Mentor Training – Michigan State University
- 2020 | Identifying and Interrupting Sexism Workshop – Michigan State University
- 2019 | Implicit Bias Training – Kellogg Biological Station
- 2019 | Congressional District Visits Day – American Institute of Biological Sciences
- 2019 | Communications Bootcamp for Scientists – American Institute of Biological Sciences
- 2018 | Connecting Research to Policy Workshop – Michigan State University
- 2018 | Undergraduate Research Mentor Training – Michigan State University
- 2017 | National Environmental Policy Act Training – United States Forest Service