Adrienne Ernst
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Education

Ph.D. Plant Biology and Conservation **Northwestern University** 2015-2021
B.A. Biology and Environmental Studies, *summa cum laude* **Knox College** 2011-2015

Honors and Awards

Garden Club of America Fellowship in Ecological Restoration	2019
Best Student Poster - Society for Ecological Restoration- Midwest Great Lakes	2019
Society for Ecological Restoration- Midwest Great Lakes Research Award	2018
Plant Biology and Conservation Award	2017
National Science Foundation Graduate Research Fellow	2016-2021
Alvah Peterson Biology Prize for Outstanding Senior in Biology	2015
Elected as a Junior to Phi Beta Kappa	2014
Charles and Arvilla Timme Fellowship Award	2014
Dean's List at Knox College	2011-2015
Knox College Lincoln Scholar	2011-2015
Pfizer Special Scholar	2011-2015

Publications

Hipp, AL, MC Glasenhardt, ML Bowles, M Garner, BC Scharenbroch, EW Williams, RS Barak, A Byrne, **AR Ernst**, E Grigg, MG Midgley, H Wagreich, DJ Larkin. 2018. Effects of phylogenetic diversity and phylogenetic identity in a restoration ecology experiment. In: R Scherson, D Faith (eds) Phylogenetic Diversity: Applications and Challenges in Biodiversity Science. Springer.

In review:
Karimi, N, DJ Larkin, MC Glasenhardt, RS Barak, EW Williams, **AR Ernst**, AL Hipp. Selection on convergent functional traits drives compositional divergence in a tallgrass prairie restoration experiment. Journal of Ecology

In revision:
Ernst, AR, RS Barak, AL Hipp, AT Kramer, HE Marx, DJ Larkin. The invasion paradox dissolves when using phylogenetic and temporal perspectives. Journal of Ecology

Ernst, AR, RS Barak, MC Glasenhardt, AT Kramer, DJ Larkin, HE Marx, RE Poulton Kamakura*, AL Hipp. Neither phylogenetic nor functional diversity increase invasion resistance in an experimental grassland restoration.

De Vitis, M, K Havens, RS Barak, L Egerton-Warburton, **AR Ernst**, M Evans, JB Fant, AJ Foxx, K Hadley, J Jabcon, J O'Shaugnessey, S Ramakrishna, D Sollenberger, S Taddeo, R Urbina-Casanova, C Woolridge, L Xu, J Zeldin, AT Kramer. Why are some species missing in restorations? A roadmap for diagnosing and treating dark diversity.

*undergraduate student

Presentations

Ernst, AR, RS Barak, AT Kramer, DJ Larkin, HE Marx, AL Hipp. 2021. Phylogenetic insights to the invasion paradox. Ecological Society of America.

Ernst, AR, MC Glasenhardt, AT Kramer, DJ Larkin, HE Marx, AL Hipp. 2021. Testing the effects of phylogenetic and functional diversity on invaders in an experimentally restored tallgrass prairie. Society for Ecological Restoration.

Ernst, AR, AL Hipp, AT Kramer. 2018. The role of phylogenetic diversity in invasion resistance and community stability: Implications for restoration. Ecological Society of America. New Orleans, LA.

Karimi, N, AL Hipp, MC Glasenhardt, EW Williams, RS Barak, **AR Ernst**. 2019. Effects of phylogenetic and trait diversity in a restoration ecology experiment. Botanical Society of America. Tucson, AZ.

Diaz, R**, **AR Ernst**, RE Poulton Kamakura. 2018. Invasive species: do relatives help or hinder? Chicago Public Schools Science Fair. Chicago, IL.

Hipp, AL, MC Glasenhardt, ML Bowles, M Garner, BC Scharenbrock, EW Williams, RS Barak, **AR Ernst**, MG Midgley, DJ Larkin. 2018. Effects of phylogenetic diversity and phylogenetic identity in a restoration ecology experiment. Botanical Society of America. Rochester, MN.

**high school student

Posters

Knauf, K*, **AR Ernst**. 2020. Phylogenetic diversity – a potential indicator of invasion resistance. Botanical Society of America.

Ernst, AR, AL Hipp, RE Poulton Kamakura**, and AT Kramer. 2019. Going beyond richness: the effect of phylogenetic and functional diversity on invasion resistance. Society for Ecological Restoration – Midwest Great Lakes. Pella, IA. –*Best student poster*

Knauf, K*, **AR Ernst**. 2019. Phylogenetic diversity – a potential indicator of invasion resistance. Society for the Advancement of Chicanos/Hispanics and Native Americans in Science. Honolulu, HI.

Poulton Kamakura, RE*, **AR Ernst**, C Pfister, AT Kramer. 2018. Propagule pressure and the establishment success of nonlocal species. University of Chicago Honors Symposium. Chicago, IL.

Poulton Kamakura, RE*, **AR Ernst**. 2018. The effects of propagule pressure and phylogenetic diversity on invasive species establishment success. Ecological Society of America. New Orleans, LA. *–1st place student poster in Restoration section*
**undergraduate student

Teaching Experience

Teaching Certificate Center for the Integration of Research, Teaching, and Learning, Northwestern University 2021
Teaching Assistant Evolutionary Processes, Northwestern University 2020
Teaching Assistant Plant Evolution and Diversity, Northwestern University 2020
Teaching Assistant Cell Biology Lab, Northwestern University 2017
TRIO Achievement Program Tutor in Biology and Environmental Studies, Knox College 2014-2015
Center for Teaching and Learning Tutor in Environmental Studies, Knox College 2013-2015
Teaching Assistant Challenges of Sustainability First Year Preceptorial, Knox College 2014

Mentoring Experience

Lake Forest College Internship Mentored one undergraduate student fall 2019
Chicago Public Schools Science Fair Mentored one high school student fall 2018
University of Chicago Honors Thesis Served as research adviser for student 2017-2018
Chicago Botanic Garden Research Experience for Undergrads Mentored two undergraduate students summer 2017 and summer 2019
Chicago Botanic Garden College First Mentored two high school students summer 2017 and summer 2019

Research Experience

Honors Thesis, Knox College; "Development of a pattern language for restoration ecology" advised by Dr. Stuart Allison 2014-2015
Ford Fellowship, Knox College; "The potential of pattern language for restoration ecology" advised by Dr. Stuart Allison Summer 2014
Mellon Community Based Research Award, Knox College, "Characterization of the local food economy in Galesburg, Illinois: the potential for local food market expansion"

advised by Dr. Peter Schwartzman 2012
Tyson Environmental Research Apprenticeship, Washington University in St. Louis, "Pollinator preference in an urban restored savanna" advised by Steve Buback 2010

Outreach Experience

Tyson Research Center, 2021, Invited seminar to discuss graduate school and research with undergraduate and high school students at Washington University in St. Louis' field station
Invasive Plant Association of Wisconsin Newsletter Spring 2020 issue "Testing native diversity as a tool against invasive species"
Downers Grove North High School Designed data collection activity at Morton Arboretum for AP Biology classes 2019
Chicago Botanic Garden Science Festival 2018
Chicago Wilderness Prairie Climate Change Adaptation Plan Advisory board member 2018
Mastering Plant Science Team Ecological Society of America 2017-2018

Academic Service

Graduate Leadership and Advocacy Council Department Representative 2019-2020
Professional Development Committee Plant Biology and Conservation Department 2019
Safe and Welcoming Environment Chair Plant Biology and Conservation Department 2018
Journal Club Chair Plant Biology and Conservation Department 2017-2018
Recruitment Chair Plant Biology and Conservation Department 2016-2017

Reviewer

Journal of Ecology
Natural Areas Journal

Affiliations

Society for Ecological Restoration
Ecological Society of America
Phi Beta Kappa