

**Adrienne Ernst**  
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## Education

<b>Ph.D.</b> Plant Biology and Conservation <b>Northwestern University</b>	2015-2021
<b>B.A.</b> Biology and Environmental Studies, <i>summa cum laude</i> <b>Knox College</b>	2011-2015

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## 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

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## 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

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## **Presentations**

**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

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## **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. –*1<sup>st</sup> place student poster in Restoration section*

\*\*undergraduate student

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## Teaching Experience

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

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## 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

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## 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

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## 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

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## 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

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## Reviewer

Journal of Ecology

Natural Areas Journal

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## Affiliations

Society for Ecological Restoration

Ecological Society of America

Phi Beta Kappa