

Ashley A. Bowman (Wojciechowski*)

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Kansas Biological Survey and Center for Ecological Research

University of Kansas, Lawrence, KS 66047

EDUCATION

Ph.D., Ecology and Evolutionary Biology May 2025
University of Kansas (Lawrence, KS)
Advisor/Committee Chair: Dr. Sara Baer
Committee: Drs. James Bever, John Blair, Bryan Foster and Kelly Kindscher

B.S., Biology (*Cum Laude*) June 2019
North Central College (Naperville, IL)

RESEARCH EXPERIENCE

Restoration Research Ecologist (University of Kansas) May 2025 – present
(Advisor: Dr. Sara Baer)

Graduate Research Assistant (University of Kansas) August 2019 – May 2025
Dissertation: *“Environmental heterogeneity effects on plant community structure, ecosystem functioning, and resilience to global change drivers in restored prairie”*
(Advisor: Dr. Sara Baer)

Undergraduate Research Assistant (North Central College) September 2017 – June 2019
Projects: *“Big bluestem interactions and nutrient transfer via common mycorrhizal networks”* & *“Big bluestem growth responses to mycorrhizal fungi under a gradient of manganese soil fertility”* (Advisor: Dr. Joanna Weremijewicz)

Undergraduate Research Fellow I, II (Morton Arboretum in Lisle, IL) June 2018 – May 2019
Projects: *“Nutrient concentrations of understory plant tissues in a chronically fertilized lowland tropical wet forest in Costa Rica”* & *“Foliar nutrient concentrations of understory plants in a chronically fertilized lowland tropical wet forest in Costa Rica”*
(Advisor: Dr. Silvia Alvarez-Clare)

Summer Undergraduate Research Assistant (North Central College) June 2017 – August 2017
Project: *“Environmental detection of amphibian pathogens using quantitative PCR”*
(Advisor: Dr. Gregory Ruthig)

TEACHING EXPERIENCE (* award won)

Graduate Teaching Instructor (University of Kansas)
BIOL415: Field and Laboratory Methods in Ecology August – December 2023, 2024
Co-organized with Graduate Instructors: Alex Hoffpauir (2024), Jessica Wilhelm (2023)
Instructors of Record: Drs. Bryan Foster & Sharon Billings (2024), Ben Sikes & Dan Reuman (2023)

Graduate Teaching Assistant (University of Kansas)
BIOL350: Principles of Genetics January – May 2022, *2023, 2024
Instructors of Record: Drs. Kristina Holder, Jae Choi (2023-2024), and Jamie Walters (2022)

<u>BIO100: Principles of Biology</u>	August – December 2020, 2021
Instructors of Record: Drs. Kristina Holder and Tara Marriage	
Guest Lecturer (Free State High School in Lawrence, KS)	March 2020
<u>AP Biology</u> “Exploring Soil Microbial Communities” Presentation/Lab Experiment	
Co-organized with Graduate Student: Kayla Clouse	
Undergraduate Teaching Assistant (North Central College)	
<u>BIO151L: Biological Investigation I</u>	January – March 2018, 2019
<u>BIO152L: Biological Investigation II</u>	September – November 2017, 2018
<u>BIO251L: Genetics and Evolution</u>	March – June 2017, 2018
<u>BIO253L: Ecology and Environment</u>	September – November 2018
	March – June 2018
Undergraduate Supplemental Instructor (North Central College)	
<u>BIO151: Biological Investigation I</u>	January – March 2018, 2019
<u>BIO152: Biological Investigation II</u>	September – November 2017, 2018
<u>BIO251: Genetics and Evolution</u>	January – March 2019
	September – November 2017, 2018
Undergraduate Tutor (North Central College)	
<u>BIO151: Biological Investigation I</u>	September 2018 – March 2019
<u>BIO152: Biological Investigations II</u>	March 2018 – June 2019
<u>BIO251: Genetics and Evolution</u>	September 2018 – November 2019
<u>BIO253: Ecology and Environment</u>	March 2018 – June 2019

PUBLICATIONS (^ mentored student)

2. ^Krause, A.K., **A.A. Wojciechowski**, and S.G. Baer. 2025. Nutrient enrichment drives accelerative effect of soil heterogeneity on the flowering phenology of a dominant grass. *Ecosphere*. e70141. <https://doi.org/10.1002/ecs2.70141>
1. **Wojciechowski, A.A.**, J.M. Blair, S.L. Collins, and S.G. Baer. 2024. Heterogeneity promotes resilience in restored prairie: Implications for the environmental heterogeneity hypothesis. *Ecological Applications*. e3006. <https://doi.org/10.1002/eap.3006>

POPULAR PRESS ARTICLES

3. R. Bryant. 2025. “Soil nutrients, not drought, impact soil microbes in a prairie restoration experiment.” Grassland Heritage Foundation Spring Newsletter. https://www.grasslandheritage.org/_files/ugd/5bfa39_c1ed14743ba3468eab12cfada91f3bfe.pdf
2. R. Koester. 2021. “#KUFieldWorks: Harvesting plant seeds and restoring native prairies in the Konza Prairie: Q & A with Ashley Wojciechowski.” KU Office of Research. <https://research.ku.edu/news/article/2021/07/29/news/kufieldworks-harvesting-plant-seeds-and-restoring-native-prairies-konza-prairie>
1. A.R. Grender. 2021. “Discover what’s growing at KU’s Community Garden with Ashley Wojciechowski, Kayla Clouse and Haley Burrill.” KU College Stories: College of Liberal Arts and Sciences. <https://blog-college.ku.edu/discover-whats-growing-kus-community-garden>

PRESENTATIONS (* invited presentation, ^ mentored student, * award won)

Oral Presentations

Bowman, A.A. 2025. "Environmental heterogeneity effects on plant community structure, ecosystem functioning, and resilience to global change drivers in restored prairie" KU Department of Ecology & Evolutionary Biology Dissertation Defense (Lawrence, KS).

***Bowman, A.A.** 2025. "Soil heterogeneity promotes resilience in restored prairie." KU Department of Ecology & Evolutionary Biology Recruitment Seminar (Lawrence, KS).

Bowman, A.A., and S.G. Baer. 2025. "Long-term soil nitrogen limitation and multi-year-imposed drought promotes forb productivity." Kansas Natural Resources Conference (Manhattan, KS).

Wojciechowski, A.A. 2024. "Heterogeneity promotes resilience in restored prairie: Implications for the environmental heterogeneity hypothesis." Konza LTER Monthly Meeting (Virtual).

[^]Kastens, M.E., **A.A Wojciechowski**, and S.G. Baer. 2023. "Effects of drought and nutrient treatments on soil properties influencing microbial communities in restored tallgrass prairie." Konza LTER 2023 REU Student Symposium (Virtual: non-participant).

***Wojciechowski, A.A.** 2023. "Looking above- and belowground: restored prairie recovery from long-term disturbance and resilience in the face of global change" in the "Prairie and Grassland Resilience in the Face of Climate Change" Panel. North American Prairie Conference (Des Moines, IA).

Summers, D.E., K.D. Eckhoff, **A.A. Wojciechowski**, and S.G. Baer. 2023. "Variation among ecotypes and populations of native grasses sourced across large gradients and local scales to inform prairie restoration." KU Postbaccalaureate Research Education Program Final Presentations (Lawrence, KS: non-participant).

Wojciechowski, A.A. 2023. "The effects of imposed drought and nutrient availability on soil microbial biomass and enzyme activity in a long-term restored grassland." Midwest Ecology and Evolution Conference (Louisville, KY).

Wojciechowski, A.A., J.M. Blair, S.L. Collins, and S.G. 2023. "Long-term restored prairie functions similarly to native tallgrass prairie and environmental heterogeneity promotes resilience to drought." Kansas Natural Resources Conference (Manhattan, KS).

***Wojciechowski, A.A.** 2022. "It takes time: Engaging in undergraduate research to studying a long-term restoration prairie." North Central College Department of Biology Seminar (Naperville, IL).

Wojciechowski, A.A., and S.G. Baer. 2022. "Drought and long-term nutrient availability treatment effects on plant diversity and productivity in restored prairie." Ecological Society of America (Montréal, Canada).

Vincent, A.G., D. Mattey-Trigueros, C. Coto-López, **A.A. Wojciechowski**, M.G. Midgley, C.S. Chinchilla, G. Avalos, R. Condit, and S. Alvarez-Clare. 2022. "Ecological responses in 12 years of fertilization in a lowland wet forest in Costa Rica." Association for Tropical Biology and Conservation (Cartagena de Indias, Columbia: non-participant).

[^]Krause, A.G., **A.A. Wojciechowski**, and S.G. Baer. 2022. "Nutrient heterogeneity alters big bluestem phenology in restored prairie." Konza LTER Annual Meeting (Manhattan, KS: non-participant).

[^]Krause, A.G., **A.A. Wojciechowski**, and S.G. Baer. 2022. "Soil heterogeneity and drought affects big bluestem phenology in restored prairie." Central Ecology and Evolution Conference (Virtual, originally scheduled for Murfreesboro, Tennessee).

Wojciechowski, A.A., [^]A.G. Krause, and S.G. Baer. 2022. "Nutrient availability and drought effects on big bluestem phenology in restored prairie." Midwest Ecology and Evolution Conference (Virtual, originally scheduled for Lawrence, KS).

[^]Krause, A.G., **A.A. Wojciechowski**, and S.G. Baer. 2022. "Nutrient heterogeneity alters big bluestem phenology in restored prairie." Midwest Ecology and Evolution Conference (Virtual, originally scheduled for Lawrence, KS: non-participant).

Wojciechowski, A.A., J.M. Blair, S.L. Collins, and S.G. Baer. 2022. "Soil heterogeneity promotes plant richness in restored prairie." Kansas Natural Resources Conference (Manhattan, KS).

Wojciechowski, A.A., J.M. Blair, S.L. Collins, and S.G. Baer. 2021. "Heterogeneity begets heterogeneity: Increasing soil heterogeneity increases plant diversity and richness." Konza LTER Annual Meeting (Manhattan, KS).

Wojciechowski, A.A., S. Alvarez-Clare, [^]A. Sanchez, [^]M.A. Tenedor, A. Vincent, and M.G. Midgley. 2019. "Nutrient Concentrations of Understory Plant Tissues in a Chronically Fertilized Lowland Tropical Wet Forest in Costa Rica." Midwest Ecology and Evolution Conference (Terre Haute, IN).

Mitra, C., M. Ernst, A. Fagerson, E. Glaser, A. Neimeyer, B. Pessman, and **A. Wojciechowski**. 2018. "Does increased rearing temperature affect behavior and/or physiology of *Gryllodes sigillatus*?" Animal Behavior Society (Milwaukee, WI: non-participant).

Wojciechowski, A.A., S. Alvarez-Clare, [^]A. Sanchez, [^]M.A. Tenedor, A. Vincent, and M.G. Midgley. 2018. "Foliar Nutrient Concentrations of Understory Plants in a Chronically Fertilized Lowland Tropical Wet Forest in Costa Rica." Field Museum of Natural History Undergraduate Research Symposium (Chicago, IL).

Wojciechowski, A.A., S. Alvarez-Clare, [^]A. Sanchez, [^]M.A. Tenedor, A. Vincent, and M.G. Midgley. 2018. "Foliar Nutrient Concentrations of Understory Plants in a Chronically Fertilized Lowland Tropical Wet Forest in Costa Rica." Center for Tree Science Undergraduate Research Symposium (Lisle, IL).

Wojciechowski, A.A., [^]S. Sorrentino, and J. Weremijewicz. 2019. "Mineral nutrient distribution within common mycorrhizal networks- interplant transfer or partitioning from the soil?" North Central College Rall Symposium for Undergraduate Research (Naperville, IL).

Wojciechowski, A.A., [^]S. Sorrentino, and J. Weremijewicz. 2019. "Big Bluestem interactions and nutrient transfer via common mycorrhizal networks." North Central College Department of Biology Seminar (Naperville, IL).

Poster Presentations

Wojciechowski, A.A., J.M. Blair, S.L. Collins, and S.G. Baer. 2024. "Environmental heterogeneity maintains plant diversity and community heterogeneity across experimental restoration prairie spatial scales." Konza LTER Annual Meeting (Manhattan, KS).

Wojciechowski, A.A., J.M. Blair, and S.G Baer. 2023. "Nutrient availability and soil depth influence soil carbon and nitrogen stocks in a long-term grassland restoration." Ecological Society of America (Portland, OR).

[^]Krause, A.K., **A.A. Wojciechowski**, and S.G Baer. 2023. "Heterogeneity and global change drivers effect the phenology of a dominant grass in restored tallgrass prairie." Ecological Society of America (Portland, OR: non-participant).

Wojciechowski, A.A., J.M. Blair, S.L. Collins, and S.G. Baer. 2023. "Decadal-restored prairie is functionally similar to native prairie and resilient to drought." Konza LTER Site Review (Manhattan, KS).

[^]Krause, A.K., **A.A. Wojciechowski**, and S.G Baer. 2023. "Heterogeneity and global change drivers effect the phenology of a dominant grass in restored tallgrass prairie." Konza LTER Site Review (Manhattan, KS: non-participant).

^{*}**Wojciechowski, A.A.**, J.M. Blair, S.L. Collins, and S.G. Baer. 2021. "Heterogeneity begets heterogeneity: Increasing soil heterogeneity increases plant diversity and richness." Ecological Society of America (Virtual, originally scheduled for Long Beach, CA).

Wojciechowski, A.A., and S.G Baer. 2021. "Plant diversity and aboveground productivity response to long-term nutrient availability and first year-imposed drought in restored prairie." Midwest Ecology and Evolution Conference (Virtual, originally scheduled for DeKalb, IL).

^{*}**Wojciechowski, A.A.**, J.M. Blair, S.L. Collins, and S.G. Baer. 2020. "Environmental heterogeneity increases resilience of a restored grassland to interannual variability in precipitation." Ecological Society of America. (Virtual, originally scheduled for Salt Lake City, UT).

Neimeyer, A., **A.A. Wojciechowski**, and C. Mitra. 2018. "Male *Gryllodes sigillatus* rear at higher temperature take more time to produce a spermatophylax." North Central College Summer Research Colloquium (Naperville, IL).

Neimeyer, A., **A.A. Wojciechowski**, and C. Mitra. 2018. "Male *Gryllodes sigillatus* rear at higher temperature take more time to produce a spermatophylax." Animal Behavior Society (Milwaukee, WI: non-participant).

Wojciechowski, A.A., and J. Weremijewicz. 2018. "Big Bluestem growth responses to mycorrhizal fungi under a gradient of manganese soil fertility." North Central College Rall Symposium for Undergraduate Research (Naperville, IL).

Bae, J., A. Halverson, **A.A. Wojciechowski**, and G. Ruthig. 2017. "Environmental detection of amphibian pathogens using quantitative PCR." North Central College Rall Symposium for Undergraduate Research (Naperville, IL).

Bae, J., A. Halverson, **A.A. Wojciechowski**, and G. Ruthig. 2018. "Environmental detection of amphibian pathogens using quantitative PCR." National Conference for Undergraduate Research (Edmond, OK).

Bae, J., A. Halverson, **A.A. Wojciechowski**, and G. Ruthig. 2018. "Environmental detection of amphibian pathogens using quantitative PCR." Accredited Colleges of the Chicagoland Area Student Scholarship Symposium (Lisle, IL).

Bae, J., A. Halverson, **A.A. Wojciechowski**, and G. Ruthig. 2017. "Environmental detection of amphibian pathogens using quantitative PCR." North Central College Summer Research Colloquium (Naperville, IL).

MENTORED STUDENTS IN RESEARCH

University of Kansas

Anna Krause (Biology, English & French Majors) May 2021 – December 2024
 Biology Honors Thesis (2021): "Environmental heterogeneity affects timing and variability of big bluestem phenology in restored prairie"

Marlowe Kastens (Biology and Environmental Studies Majors) June 2023 – October 2023
 Konza LTER REU (2023): "Effects of drought and nutrient treatments on soil properties influencing microbial communities in restored tallgrass prairie."

Undergraduate Research Assistants in the Baer Lab August 2019 – May 2025
 Mattie Wiseman, Zoe Bedrosian, Robert Fraumeni, Clancy White, Grace Williams, Jaiden Brabec, and Alexa Magstadt

North Central College

Sophia Sorrentino (Biology Major) December 2018 – June 2019

Morton Arboretum

Alana Depaz (Illinois Math and Science Academy HS student)	September 2018 – May 2019
Amayrani Sanchez (Illinois Math and Science Academy HS student)	June 2018 – May 2019
Mary Ashley Tenedor (Illinois Math and Science Academy HS student)	June 2018 – May 2019

GRANTS

Research Funding

Grassland Heritage Foundation Rachel Snyder Memorial Scholarship (\$1,000)	2022
KU Doctoral Student Research Fund Award (\$1,500)	2022
Extended Morton Arboretum Undergraduate Research Fellowship (\$4,950)	2018
North Central College Richter Grant Fellowship (\$4,400)	2018

Student Organizational Funding

University of Kansas Student Senate Funding (~\$8,300)	2019 – 2024
University of Kansas Student Environmental Advisory Board Grant (\$1,050)	2019

AWARDS AND HONORS

University of Kansas

Kansas Natural Resources Conference Registration Scholarship (<\$100)	December 2022, 2024
Kenneth B. Armitage Graduate Teaching Award for KU Undergraduate Biology (\$1,000)	May 2023
KU EEB Graduate Student Organization Travel Award (\$500)	May 2023
KU Graduate Scholarly Development Fund: EEB Graduate Travel Grant (\$750)	January 2023
1 st Place in the ESA Ecology Restoration Section Student Poster Contest (\$300)	August 2021
3 rd Place in the ESA Ecology Restoration Section Student Poster Contest (\$100)	August 2020

North Central College

Dean's Scholarship (Cumulative \$74,000)	September 2015 - June 2019
Alumni Referral Scholarship (Cumulative \$4,000)	September 2015 - June 2019
Dane Scag Science Scholarship (Cumulative \$4,000)	September 2017 - June 2019
Megan Sweeney Award (Outstanding Scholarship and Campus Involvement)	May 2019
Morton Arboretum Conference Award (\$500)	May 2019
Dean's List	September 2016 - November 2016, March 2017 - March 2019
NCC '19 Science Scholarship (Cumulative \$6,000)	September 2015 - June 2018
Norman and Rose Lewis Endowed Scholarship (\$11,019)	May 2018
First Slovak Ladies Association Scholarship (\$1,250)	May 2018
Culver's VIP Scholarship (Cumulative \$5,750)	May 2015, 2017, 2018
Student Conference Travel Program (\$650)	April 2018

PROFESSIONAL ACTIVITIES, SERVICE, AND OUTREACH

Journal Reviewer

- Annals of Botany (1, November 2021)
- Ecological Applications (1, October 2020)

“Skype a Scientist” Volunteer Scientist

Matched with ~40 classes (see map below):



- 1- Kindergarten Class (Nashville, TN)
- 3- 1st Grade Classes (Potomac, MD)
- 4-3rd Grade Classes (Voorhees, NJ; North Hollywood, CA; Manhattan, NY)
- 8- 4th Grade Classes (Scarsdale, New York; Lexington, MA; Wichita, KS; Spotsylvania, VA; North Hollywood, CA; Wilmington, DE; Manhattan, NY)
- 5- 5th Grade Classes (North Hollywood, CA; Bellevue, WA; Denver, CO; Pembroke, MA; Santa Catarina Pinula, Guatemala)
- 3- 6th Grade Classes (Bellevue, WA; Midlothian, VA)

- 5- 9th Grade Classes (Lacey, NY; Toronto, Canada; Suzhou, China)
- 1-11th Grade Classes (Concord, OH)
- 1- 12th Grade Classes (Cornwall, Canada)
- 3- High School [Environmental] Science Classes (Jefferson, NJ; Marysville, OH; Krasnodar, Russia)
- 2- Girls Scout Troops (Chadds Ford, PA; Levittown, PA)
- 1- Girl Guide Troop (Tyndale, Canada)
- 1- Undergraduate Restoration Ecology Group (Worcester, MA)
- 1- Public Library (Mitchell, SD)
- 1- Corporate Health Care Company (Boca Raton, FL)

Common Topics: climate, ecology, gardening, Kansas ecosystems, life as a scientist, plants, pollinators, prairie ecology and restoration, trees, etc.

Panelist in the "Demystifying the Graduate School Experience" Panel April 2023
 Midwest Ecology and Evolution Conference (Louisville, KY)

Chair Organizer for the 2022 Midwest Ecology and Evolution Conference March 2022
 First in the 40+ years of MEEC history that a Kansas institution has hosted, 94 registered attendees (30 undergraduates, 52 graduate students, 12 other), 67 presenters (27 twelve-minute talks, 40 posters), 5 workshops (graduate school admission, grant writing, finding a postdoctoral research opportunity, non-academic careers in STEM, web development in EEB), virtual field trips (KU Field Station, KU Biodiversity Institute)

BioKansas "Unlocking Science" Ambassador April 2021
 Matched with High School Environmental Science Classroom in Pomona, KS

Restoration Prairie Outreach Volunteer for the Grassland Heritage Foundation April 2021
 Identified prairie plant seedlings at new restoration installation in Baldwin City, KS

Baker Wetlands Family Fun Day: "Match: Plant to Its Seed" Activity Leader September 2021

Flint Hills Plant Identification and Ecology Workshop Participant September 2019
 Nature Center for Integrative Taxonomy and Ecology

University of Kansas

Ecology and Evolutionary Biology Graduate Student Organization

General Member	August 2019 – May 2025
Treasurer	August 2022 – August 2023
Co-President	August 2021 – August 2022
Secretary	August 2020 – August 2021
Outreach Committee Co-Chair	August 2020 – August 2021
Kansas Biological Survey Student Representative	August 2020 – August 2021

KU Undergraduate Research Symposium Judge April 2022-2024

KU Community Garden
 General Member August 2019 – August 2023
 Co-President and Treasurer August 2019 – August 2023
 Donated 1500+ lbs. of produce to a local food pantry since 2019

KU EEB/KBS-CER Search Committee Student Representative August 2022 – April 2023

Monarch Watch Director and KU EEB Full Professor

KU Safe Zone Training Participant October 2022

KU Freshman Orientation Video Creator for the KU Center of Service-Learning
 "Community Organizing- Social Change at KU + Beyond" YouTube Video June 2021
<https://www.youtube.com/watch?v=8-VKPSYBE1g&t=1s>

KU GSO EEB's "Nature Walk with KU Naturalists" Activity Leader March 2020- May 2021
 Daisy Troop at KU Field Station in Lawrence, KS
 Brownie Troop at Ernie Miller Park in Olathe, KS

KU EEB Molecule Madness: Plant Scent and Molecules Activity Leader December 2019

KU Carnival of Chemistry: Strawberry DNA Extraction Activity Leader November 2019

Konza Prairie LTER October 2023
 ESA SEEDS Host Leader
 National field trip at the Konza Prairie Biological Station and LTER

Bystander Intervention Training Participant May 2022

Prescribed Burning of R20A and HQB Watersheds Participant April 2021

3 Minute "Demystifying Graduate School" YouTube Video Creator November 2020
<https://www.youtube.com/watch?v=oJINEgw2wQI&feature=youtu.be>

NSF LTER Network April 2023
 Field Futures Harassment and Assault Prevention Workshop Participant

LTER All Scientists' Meeting Attendee (Asilomar, CA) September 2022

Graduate Student Career Panels Attendee May 2021

Bystander Intervention Training Participant November 2020

Graduate Student Career Panel Series Attendee April - June 2020

North Central College May 2017 – present
Beta Beta Beta National Biological Honor Society
 Member May 2018 – June 2019
 President May 2017 – May 2018
 Secretary

Women Aspiring, Venturing and Evolving Science Club May 2018 – June 2019
 Vice President September 2017 - June 2019
 Member

Student Members of the American Chemical Society September 2018 - June 2019
 Member

Illinois Junior Academy of Science Region 9 Science Fair Judge	March 2019
Camelot Therapeutic Day School Science Fair Judge	November 2018
North Central College Cardinal Science Camp Peer Mentor	September 2018
IMSA Girls IN2 Science Event: STEM Champion of Science	February 2018
Coward Middle School STEM-a-palooza: STEM Scientist	April 2017

PROFESSIONAL SOCIETIES

Kansas Native Plant Society	2019 - present
Ecological Society of America (Restoration Ecology & Soil Ecology sections)	2020 - present
NSF Long Term Ecological Research (LTER) Network Konza Prairie (KNZ) Biological Station/LTER Site	2019 - 2025