

COREY E. PALMER

EDUCATION

Northwestern University, MS

Plant Biology and Conservation (2014)

Knox College, BA

Environmental Studies (2006)

TEACHING EXPERIENCE

Northeastern Illinois University

BIO 100 Introduction to Biology (Fall 2024, 2025, Spring 2026)
BIO 104 Our Changing Natural Environment (Fall 2019, 2024; Spring 2021, 2025)
BIO 109 Freshman Year Experience: Exotics Species in Chicago (Fall 2023)
BIO 202 General Biology II (Summer 2022)
BIO 305 Ecology (Summer 2019; Spring 2020, 2022, 2023, 2024, 2026)
BIOS 310 Ecology Concepts for Educators (Fall 2021, 2022; designed)
ESC 121 Introduction to Earth Science (Spring 2024, 2025)
ESCI 123 Environmental Geology (Fall 2020-2023; Spring 2021, 2023, 2024)
ENVI 101 Introduction to Environmental Science (Fall 2019, 2020 [x2], 2021 [x2], 2022; Spring 2020-2022)

Wilbur Wright College offered through the Chicago Botanic Garden's College First Program

ENVR ST 101: Environmental Sciences / Man and Environment I (Summer 2023)

The University of Chicago Laboratory High School

Introductory Biology (freshmen, 3 sections; March-May 2019)

AT Biology (juniors, 1 section; March-May 2019)

Northwestern University

PBC418/ENV SCI 390: Soils in the Environment - Guest Lecturer (Winter 2014)

DePaul University

ENVI 300: Plant Identification - Teaching Assistant (Spring 2010)

HONORS & AWARDS

Northeastern Illinois University Faculty Excellence Awards (2021-2022 & 2022-2023)
Northeastern Illinois University SCSE Summer Research Program Award, \$4,500 (2020)
Northwestern University Plant Biology and Conservation Travel Awards, \$490 (2013, 2014)
Stevenson High School SPARK Mentor Award (2013)
Northwestern University Plant Biology and Conservation MS Research Awards, \$2,000 (2012, 2013)
The Garden Club of America Fellowship in Ecological Restoration, \$8,000 (2013)
Northwestern University Robert D. Hevey and Constance M. Filling Fellowship, \$41,500 value (2011)
The Ecological Society of America's Plant Population Ecology Service Award, \$300 (2010)
EPA Region 5 Great Lakes Area Grants in Accountability, Education, Monitoring, Evaluation, Communication, and Partnerships- Innovative Environmental Approaches award to team at DePaul University, Indiana University, & Chicago Park District, \$181,700 (2010)
Knox College Post Baccalaureate Fellowship, \$27,606 value (2007)

PROFESSIONAL SERVICE

University Curriculum Committee, NEIU, Chicago, IL (2021-2023)

Math, Science and Technology for Quality Education Committee, NEIU, Chicago, IL (2020-2023)

Excellence in Teaching Awards Committee, NEIU, Chicago, IL (2021)

RESEARCH EXPERIENCE

Northeastern Illinois University ARCOS STEM Academy, NEIU, Chicago, IL (2024)

Faculty Leader -- guided a group of five undergraduate students in an investigation of differences in soil quality characteristics between forest and grassland systems in an urban nature preserve. Mentored students in experimental design, field sampling, laboratory testing, statistical analysis, and communication of results through posters presentations at both a local ARCOS STEM Academy Conference as well as SACNAS NDiSTEM Conference in Phoenix, AZ.

Northeastern Illinois University Student Center for Science Engagement, Chicago, IL (2020)

Principle investigator – Summer Research Program Proposal: *Analyzing Methods in Prairie Restoration*. Investigated the effects of mowing frequency on plants species diversity in NEIU's Burnham-Markham Prairie, designed to encourage student research & professional development in botany and restoration ecology. *Project suspended with Covid-19 shutdown and field work prohibitions.*

The University of Chicago Department of Neurosurgery, Chicago, IL (2015 – 2016)

Research assistant – Investigated treatment outcomes for cavernous sinus meningioma and glioma.

Collaboration with Indiana University Northwest, Gary, IN (2014 – 2015)

Co-principal investigator – Evaluated qPCR methods to investigate the influence of restoration management on the soil microbial composition of urban prairie soils; specifically, with respect increasing the resolution of a fungi:bacteria ratio (F:B) soil quality indicator by incorporating the relative abundance of conservative (Gigasporaceae) vs. weedy (Glomeraceae) families in the mutualistic microbial symbiont phylum, Glomeromycota

Northwestern University / Chicago Botanic Garden, Evanston, IL / Glencoe, IL (2011 – 2014)

Graduate student researcher – Investigated the influence of restoration management on urban prairie soils; looked particularly at the assessment of restoration outcomes on microbial community composition via the development of a Fungi:Bacteria ratio (F:B) soil quality indicator.

DePaul University Department of Environmental Science and Studies, Chicago, IL (2009 – 2013)

Research assistant – Explored trade-offs between competition and mutualism in symbiotic mycorrhizal fungi associated with native Illinois prairie plants grown in a greenhouse; additionally assessed the uses of mycorrhizal fungi in a large-scale urban prairie restoration field experiment in collaboration with Indiana University and the Chicago Park District.

TRAINING AND CERTIFICATES

AI for Teaching & Professional Practice, Northeastern Illinois University, online series, in progress, 2025

Teaching with AI-Centered and AI-Resistant Learning Experiences, ACUE, 2024

Leveraging AI to Develop Course Resources, ACUE, 2024

Writing Effective AI Prompts, ACUE, 2024

Empowering Students to Use AI Effectively, ACUE, 2024

Designing Your Online Course (DYOC), Quality Matters, Instructure, 2021

Research Communication Certificate, RCTP, Northwestern University, 2013

Anti-racist Educators, STEM Faculty Professional Development, Northeastern Illinois University, 2021

Undocumented Student Ally Training, Undocumented Student Resources, Northeastern Illinois University, 2021

Counselor Training: "Counseling for Success," The Aloha Foundation, Fairlee, VT, 1998, 2003, 2004, 2018

Unity Toastmasters, Toastmasters International, Chicago IL, 2013-2019

Improvational Comedy IFAX Levels A-F, The Second City, Chicago, IL, 2014-2018

COMPUTER SKILLS

Learning Management Systems (Desire to Learn, Blackboard, McGraw-Hill Connect); **Statistical Software and Programming language** (R, JMP, Excel); **Geographic Mapping Software** (GIS, GoogleEarth, Maps); **Cloud Computing** (Adobe Pro, Dropbox, GoogleDrive); **Microsoft Office Suite and Google Counterparts** (PowerPoint/Slides, Word/GoogleDocs, etc.); **Digital Media Software** (Photoshop, iMovie, Garage Band, Canva)

LANGUAGES

English (primary), French (intermediate), Spanish (basic), Portuguese (basic)

PROFESSIONAL PRESENTATIONS

POSTERS

- Palmer, C.** and L. Egerton-Warburton. (2014). Bacterial versus fungal contributions to microbial community structure in grasslands of differing management history. 20th World Congress of Soil Science, Jeju, South Korea.
- Palmer, C.**, J. Yost, and L. Egerton-Warburton. (2013). Soil recovery in prairie restoration: Is land management working? National Conference on Ecological Restoration, Schaumburg, IL.
- Palmer, C.**, S. Richardson, E. Middleton, J. Bever, P. Schultz, K. Jones, D. Wachtel, Z. Yermakov. (2012). Fungi can save the prairie: Revealing the benefits of arbuscular mycorrhizal fungi additions to an urban prairie installation. 97th Annual Convention of the Ecological Society of America, Portland, OR.
- Palmer, C.**, S. Richardson, E. Middleton, J. Bever, P. Schultz, K. Jones, D. Wachtel, Z. Yermakov. (2011). Investigating the outward spread of benefit from vesicular-arbuscular mycorrhizal fungi of varying origins into an urban prairie restoration. Annual meeting of the Botanical Society of America, St. Louis, MO.

PUBLIC LECTURES

- Palmer, C.** (2014). The prairie underground: Soil recovery in Chicago Wilderness restoration. Public lecture, MS thesis defense at Chicago Botanic Garden, Glencoe, Illinois.
- Palmer, C.** (2013). The Prairie Underground: Improving soil quality in midwestern grasslands. Seven Minutes of Science, an interdisciplinary science communication symposium showcasing the work of fellows in the “Ready, Set, Go” science communication training program, Northwestern University, Evanston, IL.
- Palmer, C.** (2006). Motivations and Barriers to Organic Farming in West Central Illinois. Knox College’s annual Environmental Studies Capstone Conference, Galesburg, IL.

PUBLICATIONS

- Yost, J. L., L. M. Egerton-Warburton, K. M. Schreiner, **C. E. Palmer**, and A. E. Hartemink. 2016. Impact of Restoration and Management on Aggregation and Organic Carbon Accumulation in Urban Grasslands. *Soil Sci. Soc. Am. J.* 80:992-1002. <<https://doi.org/10.2136/sssaj2015.10.0383>>.
- Yost, J., **C. Palmer**, and L. M. Egerton-Warburton. (2014). The contribution of soil aggregates to carbon sequestration in restored urban grasslands. In: A. Hartemink and K. McSweeney (Eds.) *Progress in Soil Science Series: Soil Carbon* (147-154). Heidelberg, Germany: Springer.
- Palmer, C.** (2014). The prairie underground: Soil recovery in Chicago Wilderness restoration. Masters thesis manuscript in the archives of Northwestern University and the Chicago Botanic Garden Lenhardt Library. <<https://doi.org/10.21985/N25J3Q>>.
- Middleton, E. L., S. Richardson, L. Koziol, **C. E. Palmer**, Z. Yermakov, J. A. Henning, P. A. Schultz, and J. D. Bever. (2015). Locally adapted arbuscular mycorrhizal fungi improve vigor and resistance to herbivory of native prairie plant species. *Ecosphere* 6(12):276. <<http://dx.doi.org/10.1890/ES15-00152.1>>.