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Current Position

Assistant Professor, Biology, University of Wisconsin-Stout, Menomonie WI. Sept 2016-present

Education

Ohio University; Athens OH

PhD, Plant Ecology, Spring 2013. Advisor: Dr. Brian C. McCarthy

Miami University; Oxford OH

B.S., Botany/Environmental Science, Spring 2007.

Professional Experience

September 2013-July 2016 **Visiting Assistant Professor**, Statistics, Miami University, Middletown OH

January 2013–August 2013 **Instructor**, Biology, Miami University, Middletown Ohio

September 2010–January 2012 **Graduate Assistant**, Ohio University, Athens OH

September 2007–September 2010 **Teaching Assistant**, Ohio University, Athens OH

Peer-reviewed Publications

Wahlert GA, **KE Gilland**, H Ballard. 2020. Taxonomic revision of *Rinorea ilicifolia* (Violaceae) from Africa and Madagascar. *Kew Bulletin* 75: 1–12.

Bauman JM, R Brusbin, **KE Gilland**, and ET Cline. 2016. Metals in soil and American chestnut tissue in experimental soil treatment plots on a coal mine reclaimed site. *Journal of the American Society of Mining and Reclamation* 5: 1–18.

Bauman JM, C Cochran, JI Chapman, and **KE Gilland**. 2015. Bur production and canker incidence on backcrossed restoration chestnut trees. *Journal of the American Society of Mining and Reclamation* 4: 16–32.

Bauman JM, C Cochran, Chapman, and **KE Gilland**. 2015. Plant community development following restoration treatments on a legacy reclaimed mine site. *Ecological Engineering* 83: 521–528.

- Gilland KE** and BC McCarthy. 2014. Performance and phenotypic variation of American chestnut (*Castanea dentata*) hybrids on newly reclaimed mine sites in eastern Ohio, USA. *Ecological Restoration* 32: 379–387.
- Gilland KE** and BC McCarthy. 2014. Microtopography influences early successional plant communities on experimental coal surface mine reclamation. *Restoration Ecology* 22: 232–239.
- Gilland KE** and BC McCarthy. 2012. Reintroduction of American chestnut (*Castanea dentata*) on reclaimed mine sites in Ohio: Microsite actors controlling establishment success. *Northern Journal of Applied Forestry* 29: 197–205.
- Gilland KE**, CH Keiffer, and BC McCarthy. 2012. Seed production of mature forest-grown American chestnut (*Castanea dentata* (Marsh.) Borkh). *Journal of the Torrey Botanical Society* 139: 283–289.
- McCarthy BC, **KE Gilland**, JM Bauman, and CH Keiffer. 2010. Factors affecting performance of artificially regenerated American chestnut on reclaimed mine sites. Pages 582–597 in R.I. Barnhisel (Ed.), *Bridging Reclamation, Science, and Community*. Proceedings of the National Meeting of the American Society of Mining Reclamation, Pittsburgh, PA, June 5–11, 2010.

Other publications (Non-Refereed)

- Gilland KE**, CH Keiffer, and BC McCarthy. 2013. Seed production of mature forest-grown American chestnut (*Castanea dentata* (Marsh.) Borkh). *Journal of the American chestnut foundation* (reprinted with permission).
- Gilland KE** and BC McCarthy. 2011. Book Review: A first course in statistical programming with R. by W. John Braun and Duncan J. Murdoch. *Journal of the Torrey Botanical Society* 138: 252–253

Invited seminars

- Gilland KE. March 23–24, 2021. American Chestnut: History, Restoration, Opportunities and Challenges. Minnesota Shade Tree Short Course. UMN-virtual.
- Gilland KE. December 17, 2020. Restoring American chestnut: Pathways forward. Minnesota Shade Tree Action Committee Holiday forum. Virtual.
- Gilland KE. July 23, 2016. Eastern Forests: Local Restoration challenges and Successes. Columbus State Community College, Columbus OH.
- Gilland KE. December 2, 2015. The ecology of southwest Ohio’s fragmented forests. Dayton Metroparks CafeSci, Cox Arboretum, Dayton OH.
- Gilland KE. August 1, 2015. Reclamation, Restoration, and Remediation: Mines in Ohio. Columbus State Community College, Columbus OH.
- Gilland KE. April 8, 2015. Eastern forests: Nothing left untouched. Eastern Kentucky University, Richmond KY.

- Gilland KE. December 3, 2014. Surface Mining and Reclamation: History, What We've Learned, and What We Haven't. Dayton Metroparks CafeSci, Cox Arboretum, Dayton OH.
- Gilland KE. April 1, 2014. At an intersection: Influences of landscape context and management on restoration outcomes. Miami University Scholars and Artists week, Middletown OH.
- Gilland KE. December 12, 2013. American chestnut: Where we are and where we're going. Dayton Metroparks CafeSci, Cox Arboretum, Dayton OH.
- Gilland KE and JC Chapman. April 20, 2013. Red Alert: Alien Invaders in Ohio. Miami University, Middletown OH.
- Gilland KE. December 1, 2012. American chestnut: History and restoration. Wild Ones native plant society, Inniswood Metropark, Columbus OH.
- Gilland KE. May 11, 2011. American chestnut restoration: Progress and challenges in Ohio. MD chapter of the American chestnut foundation. Isaac Walton League, Rockville MD.

Published Abstracts

- Holder R, O Reutzel, KE Gilland. October 19–20, 2021. Urbanization Impacts and Mitigation Efforts On a Small Urban Watershed In Western Wisconsin. Minnesota Water Resources Conference, Rochester MN [Poster][†]
- Gilland KE. November 2–6, 2020. American chestnut (*Castanea dentata*) as a model for tackling introduced pests and pathogens. Upper Midwest Invasive Species Conference,
- Gilland KE*, E Makina, S. Nold. July 26–28, 2019. Scientific literacy and interdisciplinary thinking via embedded research in a non-majors environmental science course. SABER, St. Paul MN. [Poster][†]
- Gilland KE*, J. Chapman. July 24-25. Spontaneous regeneration and active intervention yield novel communities a decade after FRA reclamation at Jockey Hollow at WMA. ARRI-Mined Land Reforestation Conference. Cambridge OH. [Invited]
- Gilland KE*, A Little. July 21–25, 2018. "Growing" student mindsets and study strategies in teaching upper-division plant science classes. Botanical Society of America, Rochester, MN. [Oral]
- Gilland KE* and CH Keiffer. August 6–11, 2017. Pine clear-cuts as potential avenues for American chestnut reintroduction and diversity restoration. Ecological Society of America,
- Gilland KE*. JI Chapman, M Dickey. July 28–August 3, 2016. Understory plant community response to edge type and *Lonicera Mackii* removal in an isolated urban woodlot. Botanical Society of America, Savannah, GA. [Oral][†]

- Dickey M*, KE Gilland, and JI. Chapman. February 22, 2016. Understory plant community response to edge type and *Lonicera Mackii* removal in an isolated urban woodlot. Ohio Biological Survey, Columbus OH. [Poster][†]
- Gilland KE. August 9–14, 2015. Groundcover effects on establishment of American chestnut (*Castanea dentata*) on an experimentally reclaimed surface mine. Ecological Society of America, Baltimore, MD. [Oral]
- Bauman JM*, C Cochran, J Chapman, and KE Gilland. June 6–11, 2015. Bur production and canker incidence on backcrossed restoration chestnut trees. National Meeting of the American Society of Mining and Reclamation, Lexington, KY. [Oral][†]
- Campbell AC*, KE Gilland, and CH Keiffer. July 26–30, 2014. Successional chronosequence of woody restoration in strip mined land in Zanesville, Ohio. Botanical Society of America, Boise, Id. [Oral]
- KE Gilland. April 4–5, 2014. Even a housecat can do it: Integrating R into a distance based applied statistics class. AURCO Conference, University of Cincinnati, Clermont college. Clermont, OH. [Oral]
- Gilland KE*, CJ. Cochran, JI Chapman, JM. Bauman. December 11–12, 2013. Plant community development following restoration treatments on a legacy reclaimed mine site. OIPC/MIPN invasive symposium, North Central Weed Science Society annual conference, Columbus OH. [Oral][†]
- McCarthy* BC, LE Bizzari, and KE Gilland. June 16–20, 2013. The American chestnut: At the crossroads of ecology, restoration, and reclamation. North American Forest Ecology Workshop (NAFEW), Bloomington IN. [Oral]
- Gilland KE* and BC McCarthy. April 12–14, 2013. Microtopography influences early plant community assemblages on experimentally-reclaimed mine sites. Society for Ecological Restoration Midwest/Great Lakes chapter, Wooster OH. [Oral]
- Gilland KE* and BC McCarthy. August 5–10, 2012. Performance and leaf morphological variation of American chestnut (*Castanea dentata*) and its hybrids on reclaimed mine sites in unglaciated Ohio. Ecological Society of America, Portland OR. [Poster]
- Bauman JM*, S Hiremath, KE Gilland, and CH Keiffer. August 5–10, 2012. Ectomycorrhizal fungal community assemblage under various soil reclamation methods. The Ecological Society of America. Portland OR. [Poster]
- Gilland KE* and BC McCarthy. April 5, 2012. Performance of American chestnut (*Castanea dentata*) and its hybrids on reclaimed mine sites in unglaciated Ohio. Association of Southeastern Biologists, Athens GA. [Oral]
- Gilland KE* and BC McCarthy. August 8–12, 2011. Microsite specificity of plant colonization on reclaimed mine sites in Ohio. Ecological Society of America, Austin TX. [Poster]

- Gilland KE* and BC McCarthy. April 13–16, 2011. Factors affecting early vegetation succession on reclaimed minelands in Eastern Ohio. Association of Southeastern Biologists, Huntsville AL. [Oral]
- Gilland KE* and BC McCarthy. August 2–6, 2010. Growth and Survival of American Chestnut Seedlings on Mined Lands Reclaimed via End-dumping. Ecological Society of America, Pittsburgh PA. [Contributed Oral Presentation]
- Gilland KE* and BC McCarthy. April 10–13, 2010. Site Specific Factors and the Reintroduction of American chestnut. Association of Southeastern Biologists, Asheville NC. [Oral]
- Gilland KE *and BC McCarthy. August 2–7, 2009. Evaluating reintroduction of American chestnut *Castanea dentata* ((Marsh.) Borkh.) on reclaimed mine sites in Ohio. Ecological Society of America, Albuquerque NM. [Poster]
- Gilland KE* and BC McCarthy. May 14, 2009. Evaluating reintroduction of American chestnut *Castanea dentata* ((Marsh.) Borkh.) on reclaimed mine sites in Ohio. Ohio University Research Expo. [Poster]
- Gilland KE* and BC McCarthy. April 2, 2009. Performance of American chestnut (*Castanea Dentata* (Marsh.) Borkh) Hybrids on reclaimed mine sites in Ohio. Association of Southeastern Biologists, Birmingham AL. [Oral]
- Gilland KE*, BC McCarthy, and CH Keiffer. April 18, 2008. Two year seed production of forest-Grown American chestnut *Castanea dentata*. Association of Southeastern Biologists, Spartanburg SC. [Poster]
- Gilland KE*, CH Keiffer, and BC McCarthy. August 8, 2006. Seed production of forest-grown American chestnut, *Castanea dentata*, in West Salem, Wisconsin. Ecological Society of America, Memphis TN. [Poster]
- Gilland KE* and CH Keiffer. April 22, 2006. Ecological impact of the decline of the American chestnut *Castanea dentata*. Ohio Academy of Science, Dayton OH. [Oral]

*Presenting author

†Work involving undergraduate students

Research Grants

Collaborative Certificate in Surface Water Science Curriculum Development. Freshwater Collaborative of Wisconsin. \$19,820

American chestnut as an early successional competitor in mineland reclamation scenarios. Ohio Chapter American Chestnut foundation. \$1,000.

Impacts of Ash decline following an invasive pest invasion: embedded research establishment. UW-Stout Professional Development Grant. \$1,800

Impacts of Ash decline following insect invasion on ecosystem services: Linking basic research with applied forest management. Xcel Energy Natural Resources Fund. \$7,800.

Establishment of sustainable greenhouse management protocols. UW-Stout Student Retention Grant Program, \$2,000.

Rapid Assessment protocol and implementation. Five Rivers Metroparks, \$10,000.

Biodiversity Conservation potential of mature urban woodlots following invasive species removal. Ohio Biological survey 2015, \$500.

Effects of invasive species removal on isolated mature urban forests, Miami University Middletown Faculty Research Grant Spring 2015, \$1,200.

Effects of non-native groundcover on native tree establishment, Miami University Middletown Faculty Research Grant Spring 2014, \$1,500.

Seed bank influence on the initial colonization of an experimentally-reclaimed surface mine in eastern Ohio, Miami University Middletown Faculty Research Grant Spring 2013, \$1,850.

Spatial pattern of woody plant colonization on reclaimed coal mines in Ohio, GSS Original Work Grant Winter 2011, \$750.

Factors affecting early colonization on FRA End-Dump Coal Mine Sites, GSS Original Work Grant Winter 2010, \$750.

Performance of American chestnut on FRA End-Dump Coal Mine Sites, GSS Original Work Grant Winter 2009, \$750.

Germination of American chestnut seeds in unreclaimed mine soils. Miami University Academic Challenge 2006, \$500.

Undergraduate Mentee Funding

Holder R. Urbanization Effects on Steam Habitat and Macroinvertebrate Populations. \$1864

Jones C, K Baemmert, H Geurts. Effects of altered hydrology on *Phalaris arundinacea* L. (Reed Canary Grass) and wetland plant species richness, \$1872. Co-advised with Dr. Amanda Little

Scholarships/Fellowship

Wisconsin Teaching Fellow, 2020-2021 (\$6,800)

UW-Stout Biology Summer Faculty Fellowship, 2018 (\$3,500)

Choose Ohio First Bioinformatics Scholarship, 2010–2013 (\$11750 [\$4700 annually])

Phi Delta Theta Applied Research Scholarship, 2009–2010 (\$2400)

Howard Hughes Summer Research Internship, 2005. (\$3,000)

Courses Taught

- *Wetland Ecology (UW-Stout)
- *Restoration Ecology (UW-Stout)
- *Botany/Plant Biology (UW-Stout)
- *Biostatistics (UW-Stout)
- *Science, The Environments, and Sustainability (UW-Stout)
- *Applied Statistics, STA 301 (Miami University)
- *Statistics, STA 261 (Miami University)
- *Environmental Science, Bio 121 (Miami University).
- *Ecology of North America, Bot 171 (Miami University)
- Plant Community Ecology, PBIO 436/536 (Ohio University)
- Quantitative Methods, PBIO 415/515(Ohio University)
- Woody Plants, PBIO 220 (Ohio University)
- Biology Laboratory, Bio101L (Ohio University)
- *Courses for which I have been instructor of record

Professional Service/Membership

- UW-Stout Natural Areas club advisor (2018-present)
- Lower Chippewa Invasives Partnership steering committee (2017-present)
- UW-Stout Sustainability Steering Committee (2018-present)
- Session Presider, Ecological Society of America 2017.
- Miami University Green Club faculty co-advisor, 2013-2016
- Journals for which I have conducted peer reviews: *Sustainability, Forests, Journal of Environmental Quality, New forests, Applied Vegetation Science, Castanea*
- Ecological Society of America, 2005–present.
- Ohio University Graduate Student Senate Grant Review Committee, 2009–2011.
- Ohio University Graduate Student Senate Representative, Env. Plant Biology Dept., 2009–2010, 2011–2012.
- American chestnut Foundation Ohio Chapter: Secretary, 2008–present.
- Society of American Foresters: Member, 2007–present.
- Miami University Botany Club: President, 2004–2006.

Teaching Awards

- UW-Stout CSTEMM Excellence in Partnering with External Stakeholders Award 2020-2021
- Letter of Commendation. Miami University Center for the Enhancement of Learning, Teaching, and Undergraduate Assessment. December 2015.

Academic Awards

2nd Place, Environmental and Plant Biology Poster presentation, Ohio University Research Expo, 2011

2nd Place, Environmental and Plant Biology Poster presentation, Ohio University Research Expo, 2010

President's Distinguished Service Award, Miami University, Spring 2007

Graduate Cum Laude, Miami University, 2007

Botanical Society of America, Outstanding Young Botanist/ Certificate of Special Recognition, 2005.