

Tara L.E. Trammell

John Bartram Assistant Professor of Urban Forestry
Department of Plant and Soil Sciences, University of Delaware, Newark, DE 19716
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EDUCATION

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|------|-------|-------------|--|
| 2010 | Ph.D. | Biology | University of Louisville, Louisville, KY |
| 2001 | M.S. | Biology | University of Louisville, Louisville, KY |
| 1996 | B.A. | Mathematics | Berea College, Berea, KY |

APPOINTMENTS

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| 2015 – present | John Bartram Assistant Professor of Urban Forestry, Plant and Soil Sciences, University of Delaware |
| 2012 – 2014 | Post-Doctoral Fellow, Department of Biology, University of Utah |
| 2011 – 2012 | Research Associate, Department of Biology, University of Louisville |

ACADEMIC HONORS AND AWARDS

Soil Science Society of America, Urban and Anthropogenic Soils Division, Incoming Chair 2018
Doctoral Dissertation Completion Award, 2010
Clay Memorial Biology Scholarship Fund, 2010
US – International Association for Landscape Ecology Student Travel Award, 2009
Biology Graduate Student Research Presentation Award, 2008
Biology Graduate Student Research Publication Award, 2005
University Graduate Fellowship, University of Louisville, 2004-2006
Beechmont Garden Club Award for Outstanding Research, 2001
Phi Mu Epsilon, Math Honor Society, inducted May 1995
Vincit Qui Patitur, Junior Honor Society, inducted December 1993
Presidential Academic Fitness Award, 1992

PUBLICATIONS

Total publications = 20 peer-reviewed or in review, and four book chapters. Most recent highlighted publications shown.

Trammell, T.L.E., Pataki, D.E., Still, C.J., Ehleringer, J.R., Avolio, M.L., Bettez, N., Cavender-Bares, J., Groffman, P.M., Grove, J., Hall, S.J., Heffernan, J., Hobbie, S.E., Larson, K.L., Morse, J.L., Neill, C., Nelson, K.C., O’Neil-Dunne, J., Pearse, W.D., Roy-Chowdhury, R., Steele, M., and M.M. Wheeler. (*in revision*) Biophysical and social factors control the distribution of C₄ plants in residential lawns across seven U.S. cities. *Ecological Applications*

Locke, D.H., Avolio, M., **Trammell**, T.L.E., Chowdhury, R.R., Grove, J.M., Rogan, J., Martin, D.G., Bettez, N., Cavender-Bares, J., Groffman, P.M., Hall, S.J., Heffernan, J.B., Hobbie, S.E., Larson, K.L., Morse, J.L., Neill, C., Nelson, K.C., Ogden, L.A., O’Neil-

- Dunne, J.P.M., Pataki, D., Pearse, W.D., Polsky, C., and M.M. Wheeler. (2018) The relationships among public visibility, social norms, biodiversity, and ecosystem processes: testing the landscape mullets concept on urban residential lands. *Landscape & Urban Planning*
- Avolio, M.L., Pataki, D.E., **Trammell**, T.L.E., and J. Endter-Wada. (2018) Biodiverse cities: the nursery industry, homeowners, and neighborhood differences drive urban tree composition. *Ecological Monographs* DOI: 10.1002/ecm.1290
- Pearse, W.D., Cavender-Bares, J., Hobbie, S.E., Avolio, M.L., Bettez, N., Roy Chowdhury, R., Darling, L.E., Groffman, P.M., Grove, M., Hall, S.J., Heffernan, J.B., Learned, J., Neill, C., Nelson, K.C., Pataki, D.E., Ruddell, B.L., Steele, M.K., and T.L.E. **Trammell**. (2018) Homogenization of plant diversity, composition, and structure in North American urban yards. *Ecosphere* DOI: 10.1002/ecs2.2105
- Trammell**, T.L.E., Day, S., Pouyat, R.V., Rosier, C., Scharenbroch, B., and I. Yesilonis (2018) Drivers of urban soil carbon dynamics. In: R. Lal and B.A. Stewart (eds) *Urban Soils: Advances in Soil Science*. Taylor and Francis Publishing, Boca Raton, FL.
- Scharenbroch, B., Day, S., **Trammell**, T.L.E., and R.V. Pouyat (2018) Urban soil carbon storage. In: R. Lal and B.A. Stewart (eds) *Urban Soils: Advances in Soil Science*. Taylor and Francis Publishing, Boca Raton, FL.
- Groffman, P.M., Avolio, M., Cavender-Bares, J., Bettez, N.D., Grove, J.M., Hall, S.J., Hobbie, S.E., Larson, K.L., Lerman, S.B., Locke, D.H., Heffernan, J.B., Morse, J.L., Neill, C., Nelson, K.C., O'Neil-Dunne, J., Pataki, D.E., Polsky, C., Roy-Chowdhury, R., **Trammell**, T.L.E. (2017) Ecological homogenization of residential macrosystems. *Nature Ecology & Evolution* 1:0191 DOI:10.1038/s41559-017-0191
- Wheeler, M.M., Neill, C., Groffman, P.M., Avolio, M., Bettez, N., Cavender-Bares, J., Roy Chowdhury, R., Darling, L., Grove, M., Hall, S.J., Heffernan, J.B., Hobbie, S.E., Larson, K.L., Morse, J.L., Nelson, K.C., Ogden, L.A., O'Neil-Dunne, J., Pataki, D.E., Pearse, W.D., Polsky, C., Steele, M., and T.L.E. **Trammell** (2017) Continental-scale homogenization of residential lawn plant communities. *Landscape & Urban Planning* 165:54-63.
- Trammell**, T.L.E., Pouyat, R.V., Carreiro, M.M., and I. Yesilonis (2017) Drivers of soil and tree carbon dynamics in urban residential lawns: a modeling approach. *Ecological Applications* DOI: 10.1002/eap.1502
- Trammell**, T.L.E., Tripler, C.E., Carper, S.C., and M.M. Carreiro (2016) Potential nitrogen mineralization responses of urban and rural forest soils to elevated temperature in Louisville, KY. *Urban Ecosystems* DOI 10.1007/s11252-016-0580-y

Trammell, T.L.E., Pataki, D.E., Cavender-Bares, J., Groffman, P.M., Hall, S.J., Heffernan, J.B., Hobbie, S.E., Morse, J.L., Neill, C., and K.C. Nelson (2016) Plant N concentration and isotopic composition in residential lawns across seven U.S. cities. *Oecologia* 181: 271-285. DOI 10.1007/s00442-016-3566-9

PRESENTATIONS

Over 40 oral and poster presentations at national and international meetings since 2007 as author or coauthor, and 12 were invited oral presentations or seminars as author.

FUNDED RESEARCH GRANTS

“Urban forests predict impact of global change and plant invasion on future forest ecosystem services”. PI: **Trammell**. University of Delaware Research Foundation. Total project budget: \$35,000.

“Investigating urbanization pressures on soil carbon, nitrogen, and microbial community composition under different tree species”. PI: **Trammell**. University of Delaware General University Research. Total project budget: \$6,000.

“Collaborative Research: Macrosystems Biology-FRA: Alternative ecological futures for the American Residential Macrosystem”. PI: Groffman. Co-PI(s): Grove, Lerman, Hall, Larson, Pataki, Hobbie, Cavender-Bares, Nelson, Morse, Chowdury, Heffernan, Neill, **Trammell**, Avolio. National Science Foundation, 01/01/2017 – 12/31/2020. Total project budget to date: \$3,200,000

“Assessing and remediating the effects of invasive shrubs in urban forest fragments”. PI(s): **Trammell**, D’Amico. USDA Forest Service, Research Joint Venture Agreement (Non-Competitive). 09/01/2016 – 08/31/2018. Total project budget to date: \$90,000

“Squeezed from all sides: Urbanization, invasive species, and climate change threaten function “ of riparian forest buffers”. PI(s): Johnson, **Trammell**, Bardsley, Sullivan. Delmarva Land Grant Institution Cooperative Research Seed Funding Program, 03/01/2016 – 02/28/2018. Total project budget to date: \$30,000